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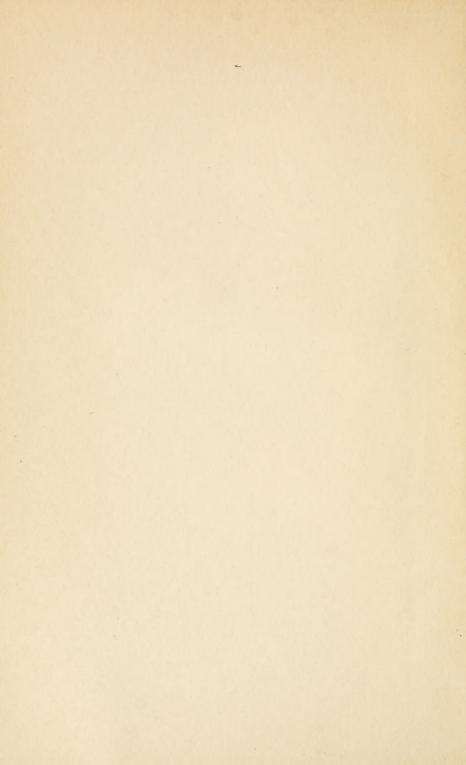
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RAILWAY RATE THEORIES OF THE INTERSTATE COMMERCE COMMISSION

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RAILWAY RATE THEORIES OF THE INTERSTATE COMMERCE COMMISSION



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CHAPTER I

SUMMARY

An inductive study of rate theories, 3. — Decisions of the Interstate Commerce Commission as material for such a study, 6. — I. Commission's preliminary statement of the fundamental principle of rate making, 9. — The determining factors in the Commission's decisions, 12. — II. Value of commodity as a rate basis, 13. — 1. Competitive commodities, 14. — (a) In different stages of manufacture, 15.—(b) As possible substitutes for each other, 27.—2. Non-competitive commodities, 30. — 3. Market value the criterion, 35. — 4. Social considerations, 37. — III. Cost of service as a rate basis, 42. — 1. Some special service rendered, 44. — 2. Comparison with other commodities, 52. — 3. Comparison with rates elsewhere, 60. — 4. Car load and less than car load shipments, 62. — Conclusion with reference to cost of service, 67.

The theory of railway rates does not seem to have secured from American economists within recent years that degree of interest which a couple of decades ago was accorded to the subject. This lack of theoretical discussion is the more surprising when one considers that there has been no lack of public interest in railway matters, as is illustrated by the discussions which have taken place both within and without legislative halls. A great mass of literature, scientific

as well as popular, dealing with various phases of the transportation problem has been called forth by this public interest in railways, and yet in all this literature one finds little trace of a serious effort once more to examine and define the principles on which the prices of railway transportation are based.

The probable explanation for this neglect of the theoretical aspects of the transportation problem is to be found in the shifting of interest which has taken place from problems arising out of railway competition to those due to threatened monopoly. A couple of decades ago the fear of railway monopolies was not seriously felt, or at best was only forcasted, not considered as a thing of immediate practical importance. All dangers from that source, it was believed, were effectually forestalled by the legislative prohibition of pooling. Having disposed of the subject in this summary fashion the public turned its attention to that which was felt to be the more urgent problem, — how to prevent discriminations between competing shippers.

Railway managers, finding their efforts to maintain high rates at non-competitive points hampered, if not blocked, and compelled at the same time to continue their struggles with rival roads at competitive points, began to seek a relief from this situation by bringing about a consolidation of the competing roads. The public has accordingly been confronted with the danger of an actual railway monopoly. The question as to whether a given rate is equitable as compared with rates charged on other commodities or with rates charged to competing shippers has given way in large measure to the question as to whether or not an entire schedule of rates is too high. Such theoretical discussion of railway rates as we have had

within recent years has therefore centered around the question as to whether rates can be so adjusted as to yield only a fair return on the value of railway property and as to the best methods of determining that value.

Important as this problem doubtless is, no one would think for a moment that its solution would solve all the difficulties of rate making, or that it would furnish all the principles from which a satisfactory theory of railway rates could be deduced. The importance of a complete theory of railway rates, in harmony with correct economic principles, will never diminish as long as transportation costs continue to form a considerable part in the total costs of producing commodities, and as long as competing shippers and competing localities continue to produce the same commodities for sale in a common market.

The need of ascertaining the economic principles which should govern the actions of those entrusted with the power of rate making has even been emphasized by recent changes in railway laws and proposals for further legislation. A number of the American states have created railway commissions or have strengthened the powers of existing ones, and have placed in their hands the power and responsibility for fixing, in large measure at least, the actual rates for transportation. The Hepburn Act of June 29, 1906, increased the power over rates possessed by the Interstate Commerce Commission and a further increase in its powers has now been made. The fact that the final determination of rates does not rest with the Commission but is left to a special Court of Commerce is probably of little consequence in so far as the final results are concerned. Experience elsewhere shows, as in the case of the English Railway

Commission, and in the case of the courts of arbitration and minimum-wage boards of the Australasian colonies, that wherever special tribunals are created having authority to determine prices and wages, these tribunals, provided only that they are not subject to frequent changes in membership, tend to evolve from their own experiences a set of principles in harmony with existing economic relations and tendencies.

This fact suggests the possibility of evolving a theory of railway rates from a study of the decisions of such railway commissions as have already been in existence. Such a study would be inductive in its methods, in contrast to the deductive methods which have usually been followed by those who have written on this subject. Starting with some general principle of valuation, such as the marginal utility of the service to the shipper, the principle of joint cost, or the tax principle of ability to pay, - various writers have endeavored to show that this given principle was fundamental in the explanation of the theory of railway charges. Without raising here the question as to the validity of the deductive method when applied to the problem of railway rates, or without attempting to discuss any of the principles mentioned above, it may be stated without hesitation that such an inductive study as is here proposed should go far towards confirming or denying the conclusions derived by the deductive method of handling the problem.

The decisions of the Interstate Commerce Commission handed down during the years 1887 to 1906 appear to offer the best opportunity for such an inductive study applicable to American conditions. During those years the Commission was required to report not only its conclusions in each case heard by it but also "the findings of fact" upon which the

conclusions were based. Since the passage of the Hepburn Act the Commission has not been required to report "the findings of fact," except in cases where damages are awarded. Tho this is doubtless sufficient for practical purposes, the absence from the reports of the Commission's "findings of fact" makes the later decisions of less value to the student who seeks to follow the path of reasoning by which the Commissioners were led to their final decision.

In view of the circumstance that in a number of important cases the decisions of the Commission were over-ruled by the courts, when the question considered was not, " is this in accordance with social and economic considerations?" but rather, "Is the decision in accordance with the law and the Constitution?" one may be inclined to question whether, after all, the decisions of the Commission do reflect economic tendencies and principles and thus afford valuable material for a study of rate theories. It may be admitted at the outset that since the Commission was in duty bound to follow the decisions of the courts in subsequent cases of the same sort, the later cases do not afford as good an opportunity as do the earlier ones for obtaining the Commission's unprejudiced views as to the principles involved. These cases are, however, in a minority and even in these cases the Commission usually makes it clear that in reaching its conclusions it is merely following the orders of the court, and is not presenting its own views on the subject. In its reported "findings of fact," the student will usually have no difficulty in discovering the answer which the Commission would have given in the particular case, had it been free to follow its own reasoning to a logical conclusion instead of applying the precedents established by the courts.

In seeking to discover from a study of the decisions of the Interstate Commerce Commission what are the underlying principles in a complete theory of railway rates, it is not intended to imply that the Commissioners are infallible or that their conclusions always reflect sound economic doctrines. On the contrary the decisions are often open to criticism. A division of opinion within the Commission itself is not infrequent, and the strong pressure of conflicting interests occasionally leads to compromises intended to satisfy in a measure all parties concerned. Yet owing to the fact that in the course of two decades numerous cases involving the same principles have come before the Commission for adjudication, and that conclusions reached on the basis of unsound reasoning have failed to give satisfaction and have had to be corrected, it is believed that a study of the cases will throw much light on economic tendencies at work to establish the truth of fundamental principles. Certainly experience is the only safe method for testing our theoretical conclusions, and Mill's dictum that "practice long precedes science" should hold true in this field of inquiry, as in other departments of human affairs.

The members of the Interstate Commerce Commission seem generally to have been appointed without much reference to political considerations and they have usually been men of such intellectual calibre

^{1 &}quot;The facts presented in this long series of cases are kaleidoscopic. A single fact may appear a hundred times but it always comes again in different company. Never, perhaps, does exactly the same group of facts reappear in exactly the same combination or relationship. Hence each group of facts embraced in a case and each decision based upon the same has an individuality of its own. Generally speaking, no two cases are alike in every respect, and no rule of thumb can be devised by which a decision can be rendered. Yet, the each decision has its peculiar characteristics, an analysis and comparison of many cases and decisions reveals certain common elements or underlying principles and views." — B. H. Meyer, Railway Legislation in the United States, p. 195.

as to command the confidence of the public. While the fact that for the most part they have been lawyers has undoubtedly tended to give a legal bias to their conclusions, membership on the Commission has usually lasted long enough to give the Commissioners familiarity with the practical side of railway affairs and with the economic considerations involved. Probably most students of American railway problems would accept Professor B. H. Mever's statement 1 that the decisions of the Interstate Commerce Commission offer to the public "the most varied, the most widely distributed, the most concrete and the best authenticated collection of facts relating to railways in the United States that is available at the present time." From the conclusions of the Commissioners who have been obliged to study this mass of facts and pass judgment on the questions at issue, it should be possible to obtain some insight into the problem of determining the general principles of rate making.2

I. Commission's Preliminary Discussion of Rate Theories

The original members of the Interstate Commerce Commission did not approach the work of rate adjudication without a preconceived opinion as to the principles on which railway rates should be based. In their First Annual Report, under the heading

¹ Railway Legislation in the United States, p. 196.

² It may not be out of place for the writer to explain the methods by which he has sought to reach the conclusions to be set forth. From a study of the abstracts of the Commission's decisions given in the annual reports he has selected those cases which seemed most likely to offer a discussion of the principles involved in rate making. 135 cases were selected and the full reports of these cases were then studied in detail and thoroly analyzed with the purpose of ascertaining what in each case was the leading principle involved. The cases were then classified according to these leading principles.

"Classification," the Commissioners discuss the theory of railway charges. Cost of service as a basis of rate making they reject, not alone because of the difficulties involved in determining the cost for each commodity separately, but because they believe that such a method of apportionment "would restrict within very narrow limits the commerce in articles whose bulk or weight was large as compared with their value."

Value of service, on the other hand, they accept as the true principle of rate making.

Such method of apportionment would be best for the country because it would enlarge commerce and extend communication; it would be best for the railroads, because it would build up a large business, and it would not be unjust to property owners, who would thus be made to pay in some proportion to benefits received.

Just how the value of the service is itself to be measured or even estimated the Commissioners do not undertake to say. In some of the early decisions rendered by the Commission, where the statement is repeated that value and not cost of service constitutes the true principle for determining the reasonableness of a given rate, we do find something approaching to a discussion of this subject. Thus, in one of the Standard Oil cases, we are told that "the effect of transportation upon market value is taken into account by carriers in making rates," ² and this the Commissioners imply is the way to measure the value of the service to the owner of the property carried.

¹ First Annual Report of the Interstate Commerce Commission, pp. 30-32.

² Rice v. Louisville & Nashville R. R. Co., 1 I. C. C. Rep. 503; 1 I. C. R. 722. (There are two editions of the bound volumes of the Interstate Commerce Commission's decisions. One edition contains only the decisions and is always referred to as I. C. C. Rep. The other edition contains Reports and Decisions and is referred to as I. C. R. The set to which I have had access contains some volumes from both editions.)

Again in the case of the *Imperial Coal Co. v. The Pittsburg & L. E. R. R. Co.*¹ the Commissioners declare that "the value of the service to the shipper, in a general sense, is the ability to reach a market and to make his commodity a subject of commerce," and a little further on they say, "In a more definite and accurate sense it consists in reaching a market at a profit, being in effect what the traffic will bear to be remunerative to the producer or dealer."

These statements all seem to imply that the value of the service is measured by the difference in the market value of the commodity at the point of shipment and at the place of unloading. Both theory and experience, however, teach us that this difference is itself determined, in the long run, by the railway rate. Thus, in the report made by the Commission as a result of its investigations of Alleged Excessive Freight Rates and Charges on Food Products,² we are told:—

The price of farm products at railway stations is usually the market price in Chicago, St. Louis, New York, or other markets to which shipments from such stations are usually made, less transportation charges and commissions.

The statement that railway rates are fixed in accordance with the value of the service is thus seen to be little more than a truism. In the oil and the coal cases just referred to, as well as elsewhere in the Commission's decisions, the value of the service is considered to have the same meaning as the railway man's expression "what the traffic will bear," and it is not difficult to see that what the traffic will bear, or what the service is worth depends upon whether one views this from the standpoint of the carrier, the shipper, the producer, or the consumer.

The term "value of service" may have some importance as an expression of an ideal relationship which should exist between railway rates, but it will not, in many instances at least, serve as a definite standard by which railway rates may be measured and compared.

More assistance in the way of solving our problem will be gained by an analysis of the Commission's decisions. In this way we shall be able to discover what concrete standards the Commissioners have themselves set up for measuring the reasonableness of a given rate when they have been brought face to face with the problems of rate making. For it may be stated at the outset that no single principle has been used by the Commission for solving all the problems of rate making; or, at any rate, if the Commissioners insist on their statement that value of service is the underlying principle in all cases, this expression is used in such a broad sense that it is made to include a variety of considerations any one of which may at times be made the leading factor in the Commission's decisions. Opinions may differ somewhat as to the best way of stating the factors involved. By the present writer they have been classified as follows: (1) the relative values of the commodities transported: (2) the relative costs of transporting the commodities: (3) the relative distances the articles are carried: (4) the relative natural advantages of location possessed by various places; (5) the special and peculiar interests of a given section or of a given class of producers; (6) the importance of maintaining competition; (7) the extent to which a given rate tends to vield a fair return on the actual capital investment.

By one or another of these standards it is believed that in all the cases coming before the Commission its members have (often times unconsciously) sought to

measure the reasonableness of a given rate. It is true that in many cases several of these standards are employed, but a careful study of the case will usually show that some one of the above considerations has been made especially prominent in reaching a conclusion; or, if the case is a very complicated one, that one standard has been applied for testing the reasonableness of the rates in one part of the case and another standard has been used elsewhere. This is practically equivalent to treating the matter as two or more cases, and it will be so treated in the following pages. In those instances where one standard of comparison has been made the primary test of the equitableness of a given rate but there are other considerations of secondary importance, the case has, of course, been treated under the primary heading.

In the following pages we shall consider separately each of the above-mentioned standards of comparison and shall endeavor to show the extent to which the Interstate Commerce Commission has made use of it as a basis for determining the reasonableness of rates. After this review it will be our task to endeavor to harmonize these diverse and sometimes apparently conflicting principles, and to see if their relations to each other cannot be so adjusted as to make it possible to evolve a complete theory of rate making.

II. VALUE OF COMMODITY

In the discussion of rate theories which is found in the First Annual Report ¹ and to which reference has already been made, the Commissioners declare that "the value of the article carried [is] the most important element in determining what shall be paid upon it." Practically the same position is taken in the Second Annual Report, where it is said that the apportionment of rates according to the value of the service "would seldom be burdensome to articles of high value, but it would relieve cheaper articles from burdens which, if apportioned strictly to the cost to the carriers of their transportation would render carriage for considerable distances out of the question."

The Commissioners are careful to state that the value of the commodity is not the only consideration which enters into value of service. The emphasis which they place upon it, however, as being "the most important element" in determining the value of the service makes it desirable that we should first take up for consideration those cases in which value of commodity is made the standard for measuring the equity of a given rate.

1. Competitive commodities

The first group of cases of this sort consists of those in which the Commission has had to deal with the rates on commodities closely related in character and frequently competitive with each other in the open market. This group may further be divided into two sub-groups. The first sub-group includes articles offered for transportation in different stages of manufacture. In such cases the relative rates charged will often determine the place where the later stages of manufacture shall be carried on. In the second sub-group, the articles do not represent the same commodity but are nevertheless substitutes for each other and the transportation rates might easily determine which commodity should be used.

(a) In the first sub-group the case 1 which first demands consideration has to do with the rates to be charged on "hub-blocks" for use in the manufacture of wheeled vehicles "but upon which only so much labor has been expended as is needful to put them into condition for seasoning." The carrier, made defendant in this proceeding, had been classifying these blocks in the fifth class with unfinished wagon materials. The Commissioners ordered a reduction to sixth class and required that the same rates be applied as were given to lumber. A difference in the values of the commodities is given as a reason for their decision. A car load of hub-blocks was worth only \$280, while a car load of the hubs, turned but not yet mortised, would be worth about \$5000. A case 2 of the same general character was that which had to do with the relative rates on partially manufactured furniture and on the finished commodities. Complaint was made that the carriers were charging the same rate (30 cents per 100 pounds) on chair materials shipped from Detroit to Omaha as they were charging for the finished chairs. In the case of the materials. the value at Detroit was only \$7 per dozen chairs, while the value of the finished chairs was \$28 per dozen at Detroit, and \$30 at Omaha.

The counsel for the roads raised two points of interest in connection with the claim of the defendant that owing to the lower value of the chair materials lower rates should be given than on the finished chairs. (1) Owing to the fact that a car load of chair materials weighed from 25,000 to 30,000 pounds while a car load of finished chairs weighed only 7000 pounds, it

¹ F. L. Hurlburt v. L. S. & M. S. R'y Co.; 2 I. C. C. Rep. 122; 2 I. C. R. 81.

² Murphy, Wasey & Co. v. Wabash R. R. Co. et al., 5 I. C. C. Rep. 122; 3 I. C. R. 725.

was said that the value of a car load of materials was about the same as that of a car load of the finished articles, and this he argued warranted charging the same rate per 100 pounds on the two shipments. (2) It was said that the proper basis for making rates was the "increased value of such car loads after their arrival at Omaha." ¹

The Commission held: (1) ² "that the proper basis would seem to be their value at Detroit when shipped"; (2) that while the carriers were justified in making such charges as would yield "a greater compensation in the aggregate for hauling a large than a small car load, as a general rule the rate per 100 pounds should be less in the former than in the latter case." The Commission, therefore, left the rates on the finished commodities at 30 cents per 100 pounds and fixed the rate on wooden materials at not more than 20 cents per 100 pounds.

Precisely the same situation was revealed in another case ³ in which the Commission expressed the opinion that unfinished bed-room sets should be given a rate of 85 per cent of that granted to the finished articles, because of "the difference in value of the unfinished and finished furniture . . . and the greater tonnage per car load which can be hauled of the former." In both of these cases it will be noted that cost of service as well as value of commodity is cited as a reason for the difference in the rates.

The same principles applied in the above cases also find expression in several other cases where the ques-

¹ This seems to be a logical application of the Commission's theory that value of service is measured by the "effect of transportation on market value,"

² For the purpose of clearly distinguishing the various points in the Commissioners' arguments I have numbered them in this case as in many succeeding cases.

 $^{^3}$ Potter Mfg. Co. v. Chi. & Grand Trunk R'y Co. et al., 5 I. C. C. Rep. 514; 4 I. C. R. 223.

tion is raised as to what shall be the relation of rates on raw or semi-finished materials as compared to those on the finished commodities. Thus the Commission refused to give its approval to the practice of certain carriers in classifying hatters' furs and fur scraps and cuttings as double first-class with correspondingly high rates, while at the same time hats, the finished product, were placed in the first class of the Official Classification. Here again other considerations, such as competition and cost of service, enter into the decision; but value of commodity is apparently the consideration chiefly held in mind. The Commissioners say:—

We should be inclined to say that fur scrap and cuttings must be rated higher than second class were it not for the claim of the defendants that this would lead to fraud in the billing of fur and fur scraps. . . . Hatters' fur, the raw material, does compete in a way with hats, the finished product, and we do not think that, under the circumstances of this case, the rate upon the raw material ought to be greater than upon the finished product.

On the same grounds the Commission refused ² to allow leather scraps to be classed with sole leather and to be given the same rates, when the complainant in the case had proved that the value of the leather scraps was only from 2 to 5 cents per pound while sole leather was valued at from 25 to 45 cents per pound. Even in this case the Commission adds a cost of service argument to its decision in stating that "liability to damage in case of scrap is practically nothing."

The Commission also decided ³ that, altho carriers were not obliged to adopt such a classification as

¹ Myer v. C. C. C. & St. L. R'y Co. et al., 9 I. C. C. Rep. 78.

² Newman v. N. Y. C. & H. R. R. R. Co. et al., 11 I. C. C. Rep. 517.

³ National Machinery & Wrecking Company v. P. C. & St. L. R'y Co. et al., 11 I. C. C. Rep. 581.

would provide one rate on new dynamos and another on second-hand ones, in case the second-hand dynamo was bought for the purpose of being converted into junk and had actually no other value, carriers were bound to apply rates offered on scrap iron. "Its value is no greater than the selling price by the pound of the metal which it contains, not indeed as great since a certain amount of labor must be expended before even that price can be obtained." Here again the logic of the value of commodity argument is somewhat disturbed by the statement that a dynamo, as such, can properly be charged a high rate because it requires great care in handling.

What appears at first as a perversion of the underlying principle of the above cases, viz. that raw materials should take a lower rate than the commodities made therefrom, is illustrated in a decision 1 of the Commission that window shades could not lawfully be charged a higher rate than the material from which they were made. The decision was, however, true to the value of commodity principle, for the evidence clearly showed that the material (window hollands) was pound for pound more valuable than the finished commodity. "The items of similar bulk and weight. less value and risk of carriage, and important volume of traffic, are all in the direction of giving window shades a classification as low as that which is provided for window hollands." The carriers had been classifying manufactured window shades in class one and window hollands in class three of the Official Classification. The Commission ordered them both into class three. The U.S. Circuit Court refused to enforce this order of the Commission on the ground that it "applied to shades having very high value as

¹ Page et al. v. D. L. & W. R. R., 6 I. C. C. Rep. 148; 49 I. C. R. 525.

well as to the cheaper varieties." Accordingly the Commission on a re-hearing of the case ¹ issued a new order which permitted the carriers "to restrict their transportation of window shades at third-class rates to those limited to a specified maximum valuation at the time of shipment." The effect of the court's ruling was, therefore, to strengthen rather than to weaken the value of commodity principle.

A case ² similar to the above was that in which the Commission decided that a rate on box shooks higher than that on lumber was not justifiable, since investigation showed that a car load of lumber weighed about 36,000 pounds and was worth from \$350 to \$800, while a car load of box shooks weighed about 30,000 pounds and was worth only \$220.

Several cases coming before the Commission have had to do with the relative rates on the principal cereals and their products. In most of these cases the Commission has based its decisions mainly on a consideration of the competitive conditions surrounding the shipping and marketing of grain and its products, but to a slight extent it has made the difference in value between the grain and its products a reason for allowing higher rates on the latter. The Commission's whole attitude on the question is well expressed in its treatment of the matter of a differential between corn and corn meal shipped from Missouri river points to Louisiana.³ Its statement is as follows:—

The Commission has, as a rule, approved a reasonable difference between any raw material and the manufactured article, but when the amount of labor, and increased value, and extra risk, were so comparatively insignificant as upon grain whole and grain ground,

¹ 6 I. C. C. Rep. 548.

² Michigan Box Co. v. F. & P. M. R. R. Co. et al., 6 I. C. C. Rep. 335.

^{3 11} I. C. C. Rep. 227.

it has not found that any very great extra freight charge was warranted by the needs of the carrier, as a protection to any industry or just to the consumer, and wherever the carrier has seen fit to waive its privilege of a slightly advanced rate for the carriage of its product, and the rate on the raw material was reasonably low, the Commission has not interfered with that discretion.

A differential of 3 cents per 100 pounds above the freight charges on corn was allowed in the transportation of corn meal from the Missouri river to points in Texas,¹ and a differential of 5 cents was allowed to the Pacific coast.² In these cases, as in most of the others which we have considered, the carriers' cost of service arguments based on the greater risk involved and the greater expense of handling the manufactured product were given some degree of recognition by the Commission, tho less emphasis was placed upon these considerations than upon the difference in the values of the commodities.

Milk and cream may for all practical purposes be regarded as the same article in different stages of manufacture and the Commission has recognized the difference in their values as a sufficient justification for charging 45 cents per can for transporting cream while only 35 cents were charged for carrying milk.³ At the same time the reasoning employed by the Commissioners in reality resolves itself into a cost of service argument.

The element of value in the commodity transported forms a proper consideration to be taken into account in the establishment of a rate. The liability of the carriers as an insurer of freight against all loss except such as is occasioned by the act of God or of the public enemy, is elementary, and the greater the value the greater the risk.

¹ 11 I. C. C. Rep. 220.

² 11 I. C. C. Rep. 212.

³ N. W. Howell et al. v. N. Y., L. E. & W. R. R. Co. et al., 2 I. C. C. Rep. 272; 2 I. C. R. 162.

Two cases which bring out very clearly the influence which value of commodity should have, in the opinion of the Commissioners, in determining the reasonableness of railway charges have to do with the relative rates on live stock and packing-house products. At the same time these cases illustrate the limits fixed by competition to the application of this principle.

In the first case, a complaint instituted by the Chicago Board of Trade,¹ the defendants, a number of carriers in the Middle West, were in the habit of giving lower rates on packing-house products from Sioux City, Iowa, and other western packing centers to Chicago than they gave to live hogs when shipped to the same market. They defended their practice on the grounds of (1) higher cost of service in the case of live hogs; (2) larger traffic in packing-house products and the materials used in these houses, such as salt, ice, etc., which furnished return cargoes in part; and (3) the necessity of protecting vested interests, since large investments had been made in the western packing industry, based on the expectation that lower rates were to be given its products.

None of these reasons was found by the Commission to be borne out by the evidence submitted or to be sufficiently important to warrant the discrimination in rates. On the contrary, the Commissioners declared:—

As articles of commerce, the evidence shows without conflict, that the live hog and its products are in direct competition with each other. This only brings out in a stronger light the discrimination that is made against the traffic in the live hog as compared with the traffic in the product. Of the two the product is very much more valuable; it is transported at more expense to the carrier.

¹ Chicago Board of Trade v. C. & A. R. R. et al., 4 I. C. C. Rep. 153; 3 I C. R. 233.

The evidence submitted tended to show that the value per 100 pounds of live hog was from about \$4.50 to \$4.75, while an equal weight of the packing-house product was worth about \$7.50.

In view of the very great difference in the values of the two commodities, we might naturally expect that much lower rates on the live animals than on the products would be ordered by the Commission. But owing to the keen competition existing between the Chicago packers and those of the western cities, the Commission did not feel warranted in going so far. They contented themselves with a notice to the carriers that the "rates made by them on live hogs should not be greater than upon packing-house products."

In the second case of this sort with which the Commission was called upon to deal, practically the same complaint was made, the complainant being the Chicago Live Stock Exchange.¹ Some new conditions in this case, however, demand our consideration.

During the years intervening between the earlier Chicago Board of Trade decision and the hearing of this case several of the carriers which were defendants in the former case had extended their lines westward beyond the Missouri river. Other lines, like the Chicago & Great Western Railway, extended only to that river. The roads extending beyond the river were inclined to establish such rates as would favor the traffic in live stock, since in this way shipments to Chicago would be entirely over their own lines. The roads terminating at the river were, on the other hand, inclined to establish such rates as favored the traffic in live-stock products; since if the animals were unloaded and slaughtered at the Missouri river towns,

¹ Chicago Live Stock Exchange v. C. & G. W. R'y Co. et al., 10 I. C. C. Rep. 428-

these lines would share in the shipment of the products to Chicago and the East. The real cause of the discrimination was, therefore, competition between the lines extending beyond the Missouri river and those terminating at the river.

The testimony offered before the Commission showed that the giving of lower rates on live-stock products than on the live animals was due to the action of the Chicago & Great Western Railway, whose lines terminated at the Missouri river. The competition of this line had forced the other roads, so it was claimed, to depart from the order issued by the Commission in the Board of Trade case. The defense offered by the Chicago & Great Western was lower cost of service in the case of the live-stock products. The evidence, however, showed that the real purpose of the discrimination was to secure for this carrier a larger share of the traffic in the products of live stock than it could otherwise hope to obtain.

The Commission found little evidence tending to support the claim of the Chicago & Great Western that the cost of service was higher for the live animals than for their products. The officials of nearly all the other roads represented in the investigation expressed the opinion that the rates on live stock should not be higher than those on animal products, while some of the officials claimed that the live-stock rates should be lower than for the meat products. The Commissioners themselves said: "Altho we think cost of transportation is a very important element, we do not consider it a controlling element in this case." They ordered the carriers to give such rates on live stock as should not exceed those on the livestock products. Their decision rested on the value of commodity principle, expressed as follows: —

In determining what the relation should be between the rates charged for transporting two different freight articles, value is often an important factor, but this is not alone because of the greater risk connected with the transportation of the more valuable article. Improvements made during recent years in the road-beds and equipment of carriers have rendered the item of risk in many cases of little consequence. The value of the article is important, principally, because of its bearing upon the value to the shipper of the transportation service; and the value of the service is, and has always been considered by carriers, one of the important elements to be considered when fixing the rates to be charged for transportation. As stated in the findings of fact, live-stock products, compared with the live animals, are about twice as valuable.

As in the Board of Trade case, so here also, the Commission was not able to follow this argument to its logical conclusion by requiring lower rates on live animals than on packing-house products. The nature of the competition between these two classes of commodities was such that equal rates seemed to be required. In describing this competition, the Commissioners made it evident that the emphasis which they placed on the relative values of the commodities was due to the fact that these values were believed to reflect the competitive relationship which existed between them. They said:—

Another very important factor is the relation existing between the articles transported. If the relation is remote, such as that between flour and silk, a change of a few cents per hundred pounds in the rates charged for transporting one of them may not affect traffic in the other; but if the relation is close, such as that between raw material on the one hand and goods manufactured from that material on the other, a slight change in the adjustment of transportation charges between the two articles may be sufficient to close manufacturing plants at some points and increase the output of plants elsewhere. And it is because of this difference that some discriminations made by the carriers are justifiable under certain circumstances.

One of the cases most difficult to solve which has come before the Commission is that of the Grain

Shippers' Association of Northwest Iowa v. the Illinois Central Railroad Company et al. The case presents too many elements to enable us to consider them all under a single heading, but value of commodity plays such an important part in the discussion that the case demands our attention here.

The rates complained of were those on corn, wheat, and other grains from Sioux City and other points in northwestern Iowa to Chicago and to points on the east bank of the Mississippi river. The complainants urged that the rates on these grains were too high to enable them to be raised and marketed with a profit. It was said that the rates were disproportionately high as compared to those on other commodities having a higher value and whose costs of transportation were higher. Particular emphasis in this connection was placed on the relatively low rates given on hogs and cattle, and it was said that the adjustment of rates was such that it favored the farmers who fed their grain and shipped the live stock and thus discriminated against the small farmers and tenants who could not afford to buy stock for feeding. When the case is looked at in this light it will be seen that it involves the question as to what shall be the rates on raw material (grain) as compared to those on its manufactured products (hogs and cattle).

The answer of the defendants to the complaint that rates on grain were excessive as compared to those on other commodities was that this complaint might have some justification if rates were made under "ideal conditions," but that under the "actual conditions" with which the carriers had to deal, where competition was the "controlling consideration," such rates as were asked for by the complainants

were impossible. In this connection the Commissioners inquired of the traffic managers present "upon what basis a freight rate was made, what elements entered into it," and their questions seem to have been particularly directed towards finding out what part the value of the commodity played in determining the rate charged for its transportation. The answers of the traffic managers, as condensed and set forth by the Commissioners, were as follows:—

In ideal traffic conditions certain elements would be taken into account in establishing a freight rate. These, among others, would be value of the commodity, the cost of service, the volume of traffic, etc. Under these conditions the witnesses rather thought that value might be a pretty important factor in determining the freight rate. Under actual conditions, while an attempt was made to regard these various considerations, as a rule, the controlling influence was competition. The witnesses expressed the opinion that the rates on grain would be, if such ideal conditions could obtain, too low 1 in proportion to the rates on manufactured articles, but it was said that such ideal conditions did not and could not obtain. . . . In a word, the freight tariff was made as it was, not because it ought to be that, but because it must be that. The railways obtained all they could, which was still too little. The witnesses all said that the grain rates in question were entirely the result of competition.

The Commissioners were inclined to agree with the traffic managers in their statement that the rates in question were established as a result of competition, but they were not willing to admit that the carriers were justified in neglecting the other elements which should be considered in the fixing of freight rates. This was particularly true of the value of the commodity. The Commissioners say:—

Value is undoubtedly an element which should be considered in the fixing of rates. It is often a most important element but

¹ The reference here seems to be to rates on grain from Minneapolis and Kansas City to Chicago, which the testimony showed were much lower than from northwest Iowa, owing to excessive competition at those points.

plainly cannot be made an arbitrary standard independent of all other considerations. This case certainly shows that in the opinion of these traffic men produced as witnesses, the present tariffs do not represent an ideal relation in rates between different commodities, and perhaps fairly shows that if such ideal relations could be obtained the rates on grains are too high as compared with those on some other commodities, especially manufactured articles.

It was, however, the relation between the rates on grain and those on live stock which seemed to the Commissioners especially unfair.

Whether the grain shall be shipped to market or fed in the vicinity of where it is raised depends, in a measure, upon the freight rate upon the grain and upon the live stock. For this reason there ought to be, to some extent, a correspondence between the rates upon these commodities, and a decrease in the rate upon one ought ordinarily to be accompanied by a decrease in the other.

An investigation of the changes in rates between 1887 and 1898, when the case was heard, showed, however, that the decline in the rate on live stock had been much greater than in that on grain. "We are of the opinion, too," say the Commissioners, "that the rate on live stock at the present time is lower in proportion to the service rendered than that on grain."

Without making any formal order in the case, the Commissioners recommended a considerable lowering of the rates on grain from Sioux City and surrounding territory to Chicago. In reaching this conclusion the members of the Commission were undoubtedly influenced mainly by the showing made by the complainants as to the relative rates on grain and live stock when compared with the relation between their market values.

(b) Coming now to the second sub-group of cases, dealing with commodities which are competitive in

character, we shall notice, first, a case which had to do with the relative rates on Pearline and common soap.¹

The carrier had undertaken to place Pearline in class four of the Southern classification and to charge a rate of 73 cents per one hundred pounds between New York and Atlanta. Common soap was placed in class six, which under ordinary conditions would have given it a rate of 49 cents to Atlanta. Owing, however, to the existence of water competition between New York and Atlanta, common soap had received a special rate to Atlanta of 33 cents per 100 pounds.

The presentation of the arguments in the case brought out the following points: (1) Pearline was an article in general use and was used for the same purpose as was common soap, with which article it was in direct competition. (2) The market value of Pearline was about twice that of the common soap. (3) The risks involved in its carriage were somewhat greater than for the soap. (4) Water competition at Savannah made necessary a lower rate on soap to Atlanta than to other points, but Pearline, owing to risks from dampness, could not be shipped by water, hence no special rate was given it to Atlanta.

The Commission held that the discrimination against Pearline was too great, that it should be placed in the fifth class and be given a rate of 60 cents per 100 pounds. Common soap was to remain in the sixth class and pay the full rates of that class, except to Atlanta, where the competition of a through rail and water route made the special rate of 33 cents per 100 pounds necessary.

In explaining the reason for allowing a difference in the rates on the two commodities, the Commissioners say:—

¹ James Pyle & Sons v. East Tenn., Va. & Ga. R. R. Co., 1 I. C. C. Rep. 465.

The very great difference in the value and also the risk in case of serious accident in the transportation of Pearline as compared with common soap would seem to indicate that there is ground for a reasonable difference in the freight rates on these two articles.

The decision seems to rest chiefly on the difference in the values of the two commodities, tho it should be noticed that two other considerations furnish a partial explanation, viz. the risks (i. e. the cost) of transportation and, in the case of the special Atlanta rate, the existence of water competition.

Value of commodity is again the controlling, tho not the exclusive, consideration in the case of *Coxe Bros. v. The Lehigh Valley R. R. Co.*¹ The complainants had asked that the same classification and rates be given to anthracite coal that were given to the bituminous product.

The Commissioners declined to make this concession on the grounds that (1) the value of the anthracite coal was greater and therefore the service of transporting it was worth more to the shipper; (2) the shorter distance from the mines to the principal markets in the case of anthracite rendered its transportation per ton-mile more expensive. This latter argument, it will be noticed, is based on cost of service.

The Commission, however, ordered that some reduction be made in the rates on anthracite, since rates on coal are generally less than on such commodities as iron ore and pig iron, whose value is greater, while the Lehigh road had in force higher rates on coal than on these commodities. The evidence showed, too, that this road had but recently raised the rates on coal, after having for two years maintained lower rates on the anthracite coal than on these iron products. The long maintenance of the lower rates

on coal satisfied the Commissioners that their rates were profitable to the carrier.

Another coal case which falls within this group is that of *McGrew v. Missouri Pacific R'y Co.*¹ The Commission decided that the carrier might properly make a distinction in classification between soft and lump coal, used only for domestic purposes, and "mine-run, nut, mill and slack" coal used only for steam purposes, and might give a lower rate to the latter class. Such a distinction clearly rests for a justification on differences in the values of the two commodities.

In the case of Wolf Bros. v. Alleghany R'y Co. et al. ² it was decided that since paper bags were made of cheaper paper, were packed in a different way, and were used for a different purpose than were merchandise envelopes, there was no objection to giving these bags a lower classification and lower rates than were accorded to the merchandise envelopes, even tho the complainant called these envelopes paper bags and was able to show that the cost of service in transporting them was less than for the ordinary envelopes.

Still another concession to value of commodity over cost of service appears in one of the Standard Oil Cases.³ The carrier was ordered to charge only on the basis of the weight of the oil carried in barrels when it charged for oil only, if carried in tanks, and not to charge barrel shipments on the gross weight.

2. Non-competitive commodities

The second class of decisions in which the value of the commodity is selected as the controlling consideration in the determination of the railway rate has to do with articles which, tho not of the same kind and

¹ 8 I. C. C. Rep. 630. ² 7 I. C. C. Rep. 40.

⁸ Rice, Robinson & Winthrop v. Western N. Y. & Penn. R. R. Co., 4 I. C. C. Rep. 131; 3 I. C. R. 162.

not directly competitive, are nevertheless so similar in character as to warrant similar treatment.

In the first case 1 of this sort the Commissioners refused permission to the defendant carrier to classify railroad ties in class five (manufactured wooden commodities) while at the same time it classified lumber and other unfinished wooden articles in class six, and in addition gave a special low rate to lumber. The defendant claimed as a reason for placing ties in a higher class than lumber that "tie shipments are less in quantity and require switching for single cars, whereas in the case of lumber, we switch a large number of cars together." The Commission rejected this cost of service argument, not because it was based on cost of service and was therefore incorrect in principle but because the statement was "not convincing."

No special reason appears in the evidence why tie shipments are not likely to be as large per day as lumber shipments, therefore the distinction cannot be sustained on the ground of greater cost of movement, for no such greater cost is established.

The Commissioners maintained that lumber and ties were so alike in character and the conditions for transporting them were so similar that they should be classed alike and that such discrimination as was shown by the defendant was not justified by the relative values of the two commodities.

In another case ² the Commissioners held that it was unjust and unreasonable to put raisins in a higher class, taking a higher rate, than was given to dried fruits, since the market value of the raisins was uniformly lower than that of California dried fruits.

¹ Reynolds v. Western N. Y. & Penn. R'y Co. et al., 1 I. C. C. Rep. 393; 1 I. C. R. 686.

² Martin v. Southern Pacific Co. et al., 2 I. C. C. Rep. 1; 2 I. C. R. 1.

The same conclusion was reached with reference to the classification of celery.¹ The carriers were ordered to give it the same classification and rates as were given to cauliflower, asparagus, lettuce, whether shipped in car load or less than car load lots. It was said that since the original classification was made, celery had come into much more common use.

Its production has greatly increased and its market value has declined. It certainly is no more a table luxury than some of the vegetables which have a lower class in the Western classification.

A rather curious attempt to adjust rates in mathematical proportion to the values of the commodities is furnished by a case ² coming before the Commission where the question was as to the relative rates on cabbages and potatoes. The Commissioners said:—

As the weight of a barrel of cabbage is three-fourths of that of a barrel of potatoes and its price or value only one-half (two fourths) it would seem that there is a difference of one-fourth in favor of cabbage. This is upon the assumption that bulk and value would operate equally in proportion to amount in enhancing rates. Our conclusion is that the rate on cabbage from Charleston should be one-fourth less than the rate on potatoes.

It should be said, however, that this reasoning was only incidental to a general discussion which dealt with more important matters, and it would be a mistake to lay much emphasis upon it as an expression of the views of the Commissioners.

In order to determine the importance which should be attached to the value of a commodity in fixing the rate which is to be paid upon it, the Commissioners have at times taken into consideration the uses to

 $^{^{1}}$ Tecumseh Celery Co. v. Cin., Jackson & Mackinaw R'y Co. et al., 5 I. C. C. Rep. 663; 4 I. C. R. 318.

 $^{^2}$ Truck Farmers' Association of Charleston and Vicinity v. Northeastern R. R. Co. of South Carolina et al., 6 I. C. C. Rep. 295.

which a given commodity is to be put. In one case ¹ the question was raised as to whether cow peas were to be classed with such commodities as corn and oats, or whether they should go into a class with commercial fertilizers and take the same rates as the latter commodity. The complainants urged that cow peas were used for fertilizing purposes, but the defendants held that they were also used extensively as a feed for cattle and even to some extent as an edible. The Commissioners found the facts to be as stated by the defendants. As a fertilizer it was shown that the cow peas were not only more valuable than other fertilizers, but were capable of fertilizing pound per pound more land than cotton-seed meal and other fertilizers:—

The planter can afford to pay a higher rate on cow peas used in the process of enriching his land than he can afford to pay upon commercial fertilizers; while on the other hand, the carriers would derive inadequate revenue from the carriage of this product if the peas should be treated as complainant insists they should be. There are other facts, however, which still further distinguish cow peas from fertilizers in general use. The vine is used as fodder in stock feeding quite extensively throughout the Southern States, and the pea itself is consumed by many as an edible, and its use as food is quite general. Again, the value of cow peas per hundred pounds is greatly in excess of that of the general fertilizer, a fact which should be considered in fixing rates.

Another case ² which illustrates the same point,—that the use to which a commodity is to be put must be considered in determining the rate to be paid upon it,—is that in which the Commissioners decided that "the Scheidel outfit," an electrical apparatus mainly employed in the production of the X-ray, should be classified with medical and scientific instruments and pay double first-class rates in the Official

¹ A. G. Swaffield v. Atlantic Coast Line R. R. Co. et al., 10 I. C. C. Rep. 281.

² W. Scheidel & Co. v. Chi. & Northwestern R'y Co. et al., 11 I. C. C. Rep. 532.

Classification, rather than be classified with "electrical appliances not otherwise specified" which were charged single first-class rates only. The Commissioners said, however, that if later there should develop a considerable demand for a similar mechanism for commercial uses, then all such mechanic appliances, including the Scheidel outfit, might be entitled to a lower rating.

The case, however, which best illustrates the principle applicable throughout this entire group is that of Rice v. Cincinnati, Washington & Baltimore Railroad Co. et al. It shows that the importance which the Commission is willing to attach to the value of a commodity as a measure of the reasonableness of a railway rate is less in the case of commodities non-character than in the case of those which are in direct competitive in competition with each other.

Complaint was made that the rate on refined petroleum oil was unreasonable as compared to that given on cotton-seed oil, which, tho transported in much the same way and having a higher market value, was nevertheless given a lower rate. The Commission declined to adjust the rates on these two commodities on the basis of their relative values, holding that inasmuch as they were not competitive commodities the discriminating rate given to one could not "appreciably affect the market price of the other," and therefore could not unjustly affect the shipper. The two products were so dissimilar in character and supplied such different demands that a low rate on one could not be of any disadvantage to the shippers of the other.

The Commissioners were willing to admit, however, that since the methods of transporting the two commodities were much the same, the rate given on one commodity might have "some bearing" on the reasonableness of the rate on the other, especially when their relative values were taken into consideration, and it was seen that the higher priced commodity was receiving the lower rate.

In respect to the methods and cost of transportation, these commodities (cotton-seed oil and turpentine) have a notable resemblance to petroleum products, and the cheapest of them is several times more valuable than illuminating oil. . . . Notwithstanding the comparatively low value of refined petroleum, the amount exacted for its transportation is in some instances 60% greater than the sum accepted for carrying cotton-seed oil between the same stations. It is impossible to reconcile such inconsistent charges. The cotton-seed oil rate, in the cases referred to, is not forced upon the railroad, and must, therefore, be presumed to be remunerative; but if the lower rate for the higher priced article is reasonable to the carrier, how can the higher rate for the lower priced article be reasonable to the shipper?"

Other cases which have come before the Commission might be cited to show how the principle of value of commodity has been made use of to determine the rate on non-competitive articles, but other considerations enter into these cases and their discussion would not aid in the presentation of the argument.

3. Market value the criterion

The third class of cases in which the value of the commodity transported is accepted as a test of the reasonableness of the railway rate is not a large one nor in itself of great importance. Its importance lies rather in the fact that these cases show that, in judging of the values of the commodities in question, the Commissioners have in mind the market values rather than the intrinsic utilities of the articles.

A manufacturer of patent medicines made objections to the Official Classification employed on eastern railway lines, according to which patent medicines were placed in first class when shipped in less than car load lots and in third class when shipped in car load lots; whereas beer, ale, etc., when shipped in less than car load quantities, were given a third class rating, and in car load lots were placed in fifth class. The complainant asserted that not only were the modes of packing, the methods of handling, and the risks of transportation the same for the patent medicines as for the beer, ale, etc., but that the "intrinsic value " of the patent medicines was no greater than that of the beer, etc. The higher market value of the patent medicines it was said was simply "the result of skill in advertising." The Commissioners, however, declared that: —

The value of an article to the manufacturer is the price it commands and it seems only reasonable that carriers should take into account the market value, a thing generally known and easily ascertained, as one of the considerations in arranging their classifications and fixing the rates that a commodity should bear. It is not seen how the relations that any specific commodity should bear to other commodities for classification purposes can be arrived at in any other practicable way.

Since the evidence in this case showed that a car load of the patent medicines in question had a market value of \$5400, while a car load of beer or ale sold for about \$1800 the Commission decided that the existing differences in classification and rates were justified.

The same attitude was observed in the case of the Andrews Soap Company v. Pittsburg, Cincinnati & St. Louis Railway Co. et al., where the complainant had

¹ Warner v. N. Y. C. and H. R. R. Co. et al., 4 I. C. C. Rep. 32; 3 I. C. R. 74.

^{2 4} I. C. C. Rep. 41; 3 I. C. R. 77.

urged that his soap, the advertised as a toilet soap, was in reality of the same character and utility as laundry soap and therefore entitled to the lower rates given to laundry soap. The Commissioners said:—

A manufacturer's description of an article to induce its purchase by the public also describes it for transportation and carriers may accept his description for purposes of classification and rates.

4. Social considerations

We come finally to a fourth class of cases in which the value of the commodity is accepted as a criterion of the reasonableness of the rates. Here social considerations are cited by the Commissioners as reasons why commodities having a high value should be called upon to pay higher rates than commodities having a low value. Such an idea finds frequent expression in the Commission's decisions, as for example when it is said in discussing the rate on hay: 1 " When the market price of a commodity yields but scant return for labor and expenses of production, the cost of transportation needs to be as moderate as may be consistent with justice to the carriers." The same position with reference to the hay rate was taken in the case of The National Hay Association v. The Lake Shore & Michigan Southern Railway Company et al.²

A more explicit enunciation of this doctrine is, however, found in the discussion of the rates on iron and steel products.³ Low rates on these commodities said the Commission are

 $^{^{1}}$ Behlmer v. Memphis & Charleston R. R. Co. et al., 6 I. C. C. Rep. 257; 4 I. C. R. 870.

² 9 I. C. C. Rep. 264.

³ Colorado Fuel & Iron Company v. The Southern Pacific Company et al., 6 I. C. C. Rep. 488,

largely due to the character of such commodities, the use to which they are put, the demand for them in large quantities throughout the country, their susceptibility of movement at less cost and risk to the carrier than high class and more valuable freight, and other like conditions. It is to the interest of the carriers as well as the public, that their rates be low enough, if not below a remunerative point, to permit the general movement and distribution of these commodities in general demand in larger quantities for construction, building, manufacturing, and other purposes. Reasonable freedom of such movement and distribution stimulates the growth and development of the country and thereby promotes all interests.

. . . Rates on steel rails and other low grade freights of the character stated, yielding per ton per mile the average received on all freight would be unjust.

A further indication of the importance which the Commissioners attached to the market values of these commodities in fixing the rates to be paid upon them is shown by the fact that it was later decided ¹ that in cases where the carriers had reduced the rates on iron and steel because of a reduction of the prices of such articles due to commercial depression, they were justified in advancing the rates when the commercial depression was past. The Commissioners were careful to repudiate the idea that freight rates in general might be adjusted on the principle of the sliding scale, but they found something akin to this system in the traffic in iron and steel and did not care to disturb it.

Iron rates seem to be peculiarly susceptible to these commercial influences. The charge for transporting pig iron from southern producers to northern points of consumption has for a long time varied directly with the value of the article transported.

Social considerations have seemed to the members of the Commission to require that the rates on the lower priced grains, corn and oats, should be lower than those on wheat,² and that a considerable reduc-

¹ In the Matter of Proposed Advances in Freight Rates, 9 I. C. C. Rep. 382.

² 4 I. C. C. Rep. 48; 3 I. C. R. 93.

tion in the price of wheat should be followed by a reduction in the rates on that commodity charged by the carrier. Generally speaking, the Commission seems committed to the principle that where the market price of a commodity is low and it is an article in general demand, the interests of the public require that the carrier should be satisfied with small profits from the transportation of this commodity.

The equitable rule doubtless is that rates should bear a fair and reasonable relation to the antecedent average cost of the traffic as delivered to the carrier for transportation and the average market price the freight will command, or, as it is termed, the commercial value of the property.²

It might be thought that the principle of value of commodity could never be applied in connection with the passenger traffic. It is true that in most countries, and to a limited extent also in the United States, the passenger coaches are divided into compartments, having different accommodations and different rates. By so doing it is expected that people of little means may nevertheless travel on the railroads if they are content to accept accommodations inferior to those furnished to the first class passengers. There is no compulsion, however, on the part of millionaires to travel first class and to pay the high rates, if they prefer to take advantage of the low rates offered to those who travel in the second or third class compartments.

In one case,³ however, the Interstate Commerce Commission has upheld certain railroads in their practice of putting immigrants into a special class

¹ 6 I. C. C. Rep. 520.

² Delaware State Grange v. N. Y., Phila. & Norfolk R. R. Co. et al., 4 I. C. C. Rep. 588; 3 I. C. R. 554.

⁸ Savery v. N. Y. C. and H. R. R. Co. et al., 2 I. C. C. Rep. 338.

and giving them lower rates than were accorded either to first or second class passengers, and in their refusal to sell tickets to other persons at the same rates as were given to immigrants even tho these other persons were willing to ride in the immigrant cars.

The reason given by the Commission for sustaining the carriers in this case was that immigrants are

a class of persons readily distinguishable from the general public, and so far constituting a special class that up to that time when they are received upon the cars they are subject to exceptional regulations for reasons, which being accepted as a basis of legislation, must be deemed sufficient.

Altho the Commissioners do not here set forth value of commodity as a reason for granting lower rates to immigrants than to other persons, it seems difficult to justify this discrimination on other grounds. The cost of service would not be less in the case of immigrants than for other persons travelling in immigrant cars. The fact that immigrants constitute "a legally recognized class of persons subject to exceptional regulations" would not of itself justify lower rates than for native-born Americans any more than it would justify higher rates. It is, however, logical to consider immigrants as constituting a class of persons possessing little means, having therefore little ability to pay and thus subject to a lower rate than that given to other passengers. Broad social and governmental considerations therefore serve to justify the lower rates given to these persons of little financial ability.

This review of the more important cases in which the Interstate Commerce Commission has based its decision in large part on considerations involving the value of the commodities, serves to show that while

value of commodity has undoubtedly at times been accepted as a test of the reasonableness of a given rate, the use made of the principle has been much less than one would naturally suppose, in view of the strong assertion by the commission that "the value of the article carried [constitutes] the most important element in determining what shall be paid upon it." There is little, indeed, in the experience of the Interstate Commerce Commission to warrant Professor E. R. Johnson's expectation that as governmental regulation proceeds, rates will more and more be fixed "with reference to the values of the commodities." 1 In those cases in which the Commissioners have referred to the principle of value of the commodity as influential in determining the rate they have never insisted that charges should be proportional to the values of the commodities.

In many of the cases decided by the Commission the value of the commodity has been referred to because it indicated in some degree the risk assumed by the carrier. In the most important group of cases which we have considered, the Commission has felt obliged to take into consideration the differences in the values of finished and unfinished goods in order to preserve competition in their production. In still other cases the desire to preserve competition among carriers has led to the consideration of the relative values of the competing commodities. In only a relatively small number of cases has the Commission felt that social and economic considerations were so urgent as to require that commodities entering largely into general consumption and having a low value

¹ Johnson, American Railway Transportation, p. 281. Cf. "The Principles of Governmental Regulation of Railways." Political Science Quarterly, vol. xv, pp. 46-47.

should be given the benefit of low rates; and even in these cases the argument might be advanced that it was the general demand for the commodities rather than their low values which led the Commissioners to prescribe the low rates.

III. COST OF SERVICE

The proposition that in the business of railway transportation, with its large proportion of fixed to circulating capital, it is impracticable to determine the costs of performing any particular service or of transporting any particular commodity, has been so often demonstrated that we need give it no further consideration. If the theory of cost of service is to be employed in explaining the principle of railway charges, the term costs must, undoubtedly, be used in the sense of joint costs.¹

We have already observed that the original members of the Interstate Commerce Commission held that the cost of service principle was not applicable to railway charges. Their attitude in this matter is well set forth in the following quotation from their decision in one of the earliest cases ² which came before them:—

While cost, as has been said, is an element to be taken into account in the fixing of rates and one of the very highest importance, it cannot, for reasons well understood, be made the rate basis, but it must in any case be used with caution and reserve. This is not merely because the word "cost" is made use of in different senses when applied to railroad traffic, it being often used to cover merely the expense of loading, moving, and unloading trains, but also because in whatever sense the word may be used, it is quite im-

¹ Professor Taussig has stated fully this theory of joint cost in its application to railway rates in the Quarterly Journal of Economics, vol. v, pp. 438-465. Reprinted in part in Ripley's "Railway Problems," pp. 123-144.

 $^{^2}$ In re petition of Louisville & Nashville Railroad Company, 1 I. C. C. Rep. 31; 1 I. C. R. 278.

possible to apportion with accuracy the cost of service among the items of the traffic. . . . Any attempt to apportion the cost, therefore, would at the best and under the most favorable circumstances only reach an approximation. This is so well understood the world over that the proposition which from time to time is made in other countries to measure the charge of the carrier by the cost of the carriage solely, have always been abandoned after investigation.

It is well known that traffic managers and others engaged in the business of transportation flatly deny that the cost of service principle can be used as a means of fixing railway rates.¹

In view of this strong agreement between railway officials and the members of the Interstate Commerce Commission as to the impossibility and undesirability of using cost of service as a measure of the reasonableness of a railway rate, it is somewhat surprising to find that in defending rates which have been made the subject of complaint to the Commission, railway officials and railway attorneys have frequently perhaps most frequently — done so by the use of cost of service arguments. Even more surprising, however, is the fact that the Commissioners have not only lent a willing ear to such arguments and sustained them whenever the evidence seemed to support them, but they have very frequently on their own initiative entered into an investigation of the cost of transportation with a view to rendering a decision on the basis of the facts ascertained by this investigation. The members of the Commission have, of course, never pretended that they could ascertain the exact proportion of the fixed and operating expenses assignable to a given commodity. Such has not been the purpose of their investigations, nor the tenor of the decisions. The attempt has not been made to

¹ Cf. Kirkman, Railway Rates and Government Control, pp. 73-75.

apportion the charges, as the Commissioners say, "strictly to the cost." But cost of service has nevertheless been used as a means of determining the reasonableness of rates in four different classes of cases. (1) When a rate higher than the ordinary could be justified on the ground that some special service had been performed or a special obligation incurred by the carrier. (2) Where a rate complained of was judged as to its reasonableness by comparing the ascertainable costs of transportation with those incurred in transporting other commodities whose rates were believed to be reasonable. (3) Where comparison was made with costs on other roads or on other parts of the system. (4) Where the costs of shipping commodities in car load lots were compared with those incurred in shipping less than car load quantities. By methods of comparison, therefore, rather than by attempting to ascertain the exact and total costs of transporting a given commodity, the Interstate Commerce Commission has made use of the cost of service principle as applied to railway rates. We shall take up for consideration each of the four classes of cases in turn.

1. Costs of rendering some special service

Under this heading, the first case with which we have to deal is that of John P. Squire & Co. v. The Michigan Central Railroad Co. et al. This case should be compared with the Chicago Board of Trade and the Chicago Live Stock Exchange cases which we have already considered and in which, it will be remembered, the Commissioners made value of commodity the controlling principle. In the present case,

however, much greater emphasis was placed upon the cost of service.

The complainant in the case was engaged in the business of slaughtering hogs in the vicinity of Boston. For some time, the railroads had granted him a rate of 30 cents per 100 lbs. on live hogs transported from Chicago to Boston. The rate on dressed beef and hog products had been fixed by the Trunk Line Association, after an exhaustive hearing, at 65 cents per With this adjustment of rates the complainant had been satisfied. Railway competition. however, soon set in, and while the rates on live hogs remained the same as before, those on hog products fell lower and lower, being at times as low as 17 cents per 100 lbs. With this relation of rates existing between the live hogs and their products, the business of the complainant was being ruined, since it was brought out in the hearing of the case that virtually the only difference in the cost of slaughtering hogs in the East and West was the cost of transporting the live animals.

The complainant asked that the rates be based on purely "commercial considerations," wholly independent of the cost of the service. He argued that the railroads should justly make relative rates such that both parties could live, and that the product rate should be higher than the live-hog rate, even if the cost of transporting the two articles were the same, which he claimed was not the case.

The argument resting on the relative values of the two commodities should have exerted an influence, it seems, on the minds of the Commissioners, since value of commodity had been accepted as the controlling principle in the earlier cases which dealt with the same commodities. In the present case the Com-

missioners did not accept this line of reasoning. They admitted that the increased value of the product might legitimately be taken into account in the fixing of the rate, but they declared that to base rates upon the theory advanced by the complainant would mean that the rates on live hogs would have to vary with every change in the market price of the animals in the western markets.

The Commission therefore proceeded to make a lengthy investigation into the relative costs of transporting the two kinds of commodities and reached the following conclusions:—

(1) The product is carried in more expensive cars. . . . The interest on the increased original cost and the greater outlay for repairs are constant expenses. (2) The weight of the refrigerator car, when loaded with the product, including the ice for refrigeration, is about 64,000 pounds, and that of the live-stock car when loaded is 46,000 pounds. If the tariff was based solely upon tonnage, that is, upon the weight of the car and its load when the carrier charges 30 cents per hundred for carrying the live hogs, the charge for carrying the product should be about 42 cents per hundred. (3) The loading and unloading of the animals by the shipper instead of the carrier is a continuing advantage. (4) The rapidity with which the cars used in the live-stock traffic are loaded render them less liable to detention, and they are returned to the traffic sooner than when loaded with the product. (5) The refrigerator cars have to be iced. Five tons of ice and salt per car are furnished in the Chicago-Boston business. This is a constant expense in summer months. (6) The product is more valuable than the live animals.

All of these considerations except the last, it will be noted, have to do with the extra costs incurred by the carriers in transporting the meat products. The costs, it is true, are not accurately determined. Indeed there is much that seems arbitrary in the Commissioners' methods of computing the extra costs due to the methods of handling the meat traffic, by which they arrive at the conclusion that the rates

in force at the time of the hearing of the case, viz. 30 cents per hundred pounds for live animals and 45 cents per hundred for the products, furnish an equitable adjustment of the dispute. The Commissioners of the Trunk Lines had previously given the question of the relative rates for these commodities much thought and had concluded that when the live-hog rate was 30 cents per 100 pounds, the rate on the hog products should be 65 cents. We are interested at present not in the merits of the decision but in the theory by which the Commissioners reached their conclusion; and concerning this their explicit statement leaves us no way in doubt.

We are of the opinion that in the fixing of relative rates upon articles strictly competitive, as these are, the proper relation should be determined from the cost of the service, and if the difference in this respect between two competitive articles can be ascertained, such a rate should be fixed for each as corresponds to the cost of service. This is fair to the carrier and we believe that the manufacturer has a right to demand of the companies that such a relation of rates as to these articles should be maintained.

In the investigation made by the Commission in 1902-1903 into The Matter of Proposed Advances in Freight Rates, an inquiry was made into the reasons for a recent advance in the rates on dressed beef from 40 cents to 45 cents per 100 pounds. The carriers claimed that the 45 cent rate was not an advance but a restoration of a rate which excessive competition had made it impossible to maintain in the past. Competitive conditions had now so changed that it was believed that the old rates could be maintained. The Commissioners after investigation concluded that the explanation given by the carriers was satisfactory and that the 45 cent rate was reasonable,—

especially in view of the fact that while the rate is high the service is expensive to the carriers. The loading of these cars is of special construction, and heavier than the ordinary car; refrigeration must be provided, which necessitates the hauling of large quantities of ice and salt, an express service is demanded and the car must be returned empty.

The same line of argument was employed in the case of the Truck Farmers' Association of Charleston and Vicinity v. Northeastern Railroad Co. of South Carolina et al.¹ The complainants claimed that 6½ cents a quart was exorbitant for transporting strawberries from Charleston, S. C., to Baltimore, Philadelphia, and New York, and that an undue disparity existed between the rates on strawberries and those on potatoes and cabbages shipped in bulk. The carriers defended the rates on berries in view of the unusual costs incurred in their transportation, which they described at length. They claimed, furthermore, that the rates were properly enough made higher on berries than on the potatoes and cabbage because the berries were worth more per pound.

The Commissioners attached little weight to this value of commodity argument made by the defendants, and in their decision placed the emphasis on the high costs of the service. They went carefully over the evidence submitted by the carriers and undertook to calculate the necessary costs of getting the berries into the New York market in good condition. They concluded that the charge of two cents per quart for icing was too high by about one half cent per quart, but otherwise they appeared satisfied with the showing made by the carriers as to the cost of service. They announced, therefore, that a rate of six cents per quart for transporting berries from Charleston to

New York was not excessive, and this decision they defended in the following manner:—

The rate per ton-mile under the charge above prescribed of six cents per quart will be very much higher than that demanded by carriers on ordinary freight. Relatively higher rates on strawberries, however, appear to be justified by the exceptional character of the service connected with their transportation. This exceptional service is necessitated by the highly perishable character of the traffic, requiring refrigeration en route, rapid transit, specially provided trains, and prompt delivery at destination. There is also involved in this service extra trouble in handling at receiving and delivering points, extra facilities at such points, the "drilling" of cars in a train, reduction of length of trains to secure celerity of movement, partially loaded cars, the return of cars empty, and perhaps other similar incidentals.

In a case 1 analogous to the above the Commission decided that 81 cents per 100 pounds was a reasonable rate for transporting peaches in car load lots from Atlanta to New York. The same considerations creating an expensive cost of service were present in this case as in the one just treated. "In view of these considerations," said the Commissioners, "we cannot say that the established rate is so excessive as to call for condemnation." An interesting feature of this case was the refusal of the Commission to allow the carriers to increase their charges in a progressive rate whenever the value of the car load exceeded \$500. The carriers sought to justify the increase on the ground that the danger of damage to freight was greater in the case of the heavier car loads and that there was no other means of covering these risks, since no charge was made for the excess over the prescribed minimum weights for car loads. It is evident that the higher rates could have been upheld on the value of commodity principle, and the

 $^{^{1}}$ Georgia Peach Growers' Association v. The Atlantic Coast Line R. R. Co. et al., 10 I. C. C. Rep. 255.

failure of the Commission to recognize this fact shows how far its members had departed from their former view that "the value of the article carried [is] the most important element in determining what shall be paid upon it."

In spite of the refusal of the Commissioners to recognize unusual liability to damage as a reason for charging higher rates in the above case, this has not always been the attitude of that body. In the case of the New Orleans Live Stock Exchange v. Texas & Pacific Railway Company,1 the peculiar argument was advanced by the defendant that certain high rates on cattle shipments, which were the subject of complaint, were due to the fact that the carrier was frequently obliged to pay excessive damages awarded to Texas shippers by the Texas courts. The Commissioners were unwilling to admit that "a judgment rendered in the course of judicial procedure is unjust or excessive," but they did recognize that the character of the live-stock traffic was such that large sums for damages might have to be paid by carriers engaged in this traffic, and that this was, "an incident in the transportation of that commodity which may properly be taken into account by the railroad in establishing its tariffs." The higher rates in this given instance were not allowed, however, for the reason that the testimony seemed to show that the large claims for damages were due to the carriers' own negligence; and the Commission held that shippers of cattle ought not to be called upon to pay higher charges for transportation "to make good the negligence of the carrier itself."

Higher rates on lumber shipped from Dalton, Georgia, to points on the Ohio river than were charged from other places near Dalton were upheld by the Commission ¹ because of differences in the cost of service which resulted from "dressing-in-transit" privileges accorded Dalton but not the other places.

The Commissioners said: —

The dressing of the lumber results in a comparatively important waste of raw material, which is by that amount loss of tonnage to the carrier, a duplication of terminal expense, a loss of time and increase of expenses by reasons of delays in the through shipment to destination.

The decision of the Commission in the case of the Commercial Club of Omaha v. The Chicago & Northwestern Railway Co. et al.2 that the carriers were privileged to charge higher rates on goods sent from Omaha, Nebraska, to points within the State of Iowa than were charged to the same points from Council Bluffs, Iowa (across the Missouri river from Omaha), rested in the main upon the opinion of the majority of the Commissioners that Council Bluffs was entitled to its natural advantages of location for carrying on a trade with Iowa cities. In part, however, the majority of the Commissioners made use of the cost of service argument as a defense of their decision; and cost of service was the sole basis of the argument employed by Commissioner Prouty, who supported the majority in its decision but not in its principal Even the dissenting Commissioners arguments. admitted that the decision of the majority might properly be upheld upon the basis of cost of service arguments were it not for the fact that to all other points than those in Iowa the carriers had established equal rates from those two cities.

J. K. Farrar et al v. Southern R'y Co, et al., 11 I. C. C. Rep. 632.

² 7 I. C. C. Rep. 386.

The cost of service argument rested upon the fact that, in carrying goods from Omaha to Iowa points, the railroads were obliged to make use of an expensive bridge across the Missouri river and to pay the tolls for the use of this bridge exacted by its owners. Messrs. Knapp and Yeomans said, for the majority:—

These shipments to Iowa towns require a greater service from the carriers than is performed for Council Bluffs merchants for they are hauled a greater distance and over an expensive bridge. The charge for this extra service is admitted to be reasonable and those for whom it is performed cannot justly complain because it is not gratuitously rendered. . . . The defendants which constructed the bridge over this river, and the defendants which have leased the right to run their trains across it are *prima facie* entitled to some compensation for their outlay.

Enough cases have been cited to show that the members of the Interstate Commerce Commission have reached the very reasonable conclusion that where the conditions of the traffic are such as to require some special service on the part of the carriers, involving unusual expenditures, the carriers are justified in demanding higher rates to cover these extra costs, and that to this extent at least the cost of service principle is applicable in the case of railway rates.

2. Comparison with other commodities

In this class of cases the Commission has sought to make a study of the comparative costs of transporting different commodities, oftentimes with a view to determining their classification. But since in the Commission's own words, "classification is the foundation of all rate making," it follows that if the classification has been based on costs, these costs inevitably determine the rates to be charged for their transportation. Possibly the best illustration of this class of cases is the effort made by the Commission to determine the relative rates on oranges and strawberries, shipped from Florida to the New York market. In an earlier case the Commission had decided that a reasonable rate on oranges was \$120 per car. On the basis of this decision the complainants asked for a reduction of the rates on strawberries which, at the time of the hearing of the case, averaged \$361.80 per car.

The Commissioners proceeded to ascertain, what, if any, were the considerations which would justify different rates on strawberries than on oranges and how great these differences should be. As stated by the Commissioners these differences are as follows. It will be noted that all but one of them have to do with cost of service.

(1) The expense of handling berries at junction or terminal points, berries not being handled with trucks, as are oranges. (2) Allowances for hauling the berry cars on the passenger trains on the line of the F. C. & P. railroad. (3) Extra dead weight of refrigerator cars when loaded with berries instead of oranges, owing to the fact that an average berry load is only half an orange load. (4) Extra risk of loss in case of accident arising from negligence of carrier. (5) Less value of the oranges. (6) Less volume of the berry traffic. (7) Only one half the weight of the average car load of oranges makes an average car load of berries. (8) Oranges can go by water or ordinary trains. Berries must go by fast trains. (9) Oranges do not require refrigeration, but refrigeration is indispensable in the berry traffic.

On the basis of these considerations the Commission ordered a reduction in the rates on berries so that they should pay only double first-class rates plus 30 cents a crate. This would make the rate on an average car load \$299.70.

¹ C. P. Perry v. The Fla. Cent. & Pen. R. R. Co. et al., 5 I. C. C. Rep. 97; 3 I. C. R. 740.

In a similar manner the Commissioners discuss the relative rates on beans and tomatoes.¹ The defendant carrier had placed beans in the second class of the Southern Classification and tomatoes in the third class, altho in weight and value the two commodities were much the same. This classification resulted in a rate of 70 cents per 100 pounds on beans shipped from Verona, Miss., to East St. Louis, Ill., while tomatoes were charged only 44 cents for the same distance. The Commission did not order a change in rates or classification, but in the following words declared that the existing rates were unwarranted: "The present difference of almost one half in the rate on beans and tomatoes, when the actual cost of transportation is nearly the same, ought to be remedied."

In several cases which have come before the Commission, having to do with the relative rates on corn and corn products, that body has, as we have seen, allowed slightly higher rates on the corn than on its products, mainly owing to the higher value of the latter commodities. In several other instances, however, the differences in the rates on these commodities have been adjusted on the basis of the comparative costs of transportation.

In the case of H. Bates and H. Bates, Jr. v. The Pennsylvania Railroad Company et al., complaint was made by a firm of Indianapolis millers that owing to a change in classification the carriers were charging a rate of 23 cents per 100 pounds for transporting corn meal from Indianapolis to Chicago, while a rate of only $18\frac{1}{2}$ cents per 100 pounds was charged for raw corn. This relation of rates was said to be proving ruinous to the Indianapolis milling industry. The

¹ W. R. Rea v. The Mobile and Ohio R. R. Co., 7 I. C. C. Rep. 43.

² 3 I. C. C. Rep. 435; 2 I. C. R. 715.

carriers based their defense mainly on the competitive conditions surrounding the traffic, particularly competition by the Great Lakes which affected the rate on corn but not that on corn products.

The Commission did not believe that water competition was very effective in the case of corn sent from Indianapolis, owing to the distance of that city from the Great Lakes. It declared that "no reason founded on cost of service exists for a difference in rates between corn and corn products," and tho it was admitted that the manufactured product was commercially a little more valuable than the corn, other advantages existed in the transportation of the product, so that "on the whole the transportation of each at the same rate was equally valuable to the carrier." The carriers were therefore ordered to cease discriminating between corn and corn products.

The carriers succeeded in obtaining a rehearing of the case,1 and having discovered that the Commission was inclined to place more weight on differences in the cost of transporting the two commodities than on differences in the commercial values, the defense prepared its brief on the basis of a cost of service argument. Evidence was submitted to show that a difference in the rates on corn and corn products was justified by higher loading and terminal expenses for the corn products than for the corn. It was shown that the difference in the rates which at the time of the former hearing was $4\frac{1}{2}$ cents per 100 pounds had now been reduced to $2\frac{1}{2}$ cents. The rates on corn could not be raised, it was said, because if this were done, it would shut the farmers of the Indianapolis region out of the eastern market, since the rates would then be higher than those from the North and West, where water competition compelled low rates. On the other hand, if the rate on corn products was made as low as that on corn, "the carrier would receive less than a justifiable charge without substantial advantage to the farmers."

On the basis of this showing the Commission decided to vacate its former order which required equal rates on the two commodities. The reasons for this reversal of its decision were stated as follows:—

(1) We think the additional testimony has established the fact that the cost of service to the carrier including terminal expenses properly chargeable as freight charges, is greater on the product than on raw corn. (2) The present rate on corn is down to the lowest point that railroads can possibly reach on corn and leave any profit, and lower than they can go on the product without loss. (3) The downward pressure of competition in the transportation of corn is greater than on the products of corn.

The Commission felt that the reduction by the carriers of the differential between corn and corn products from $4\frac{1}{2}$ to $2\frac{1}{2}$ cents per 100 pounds had remedied in large part the evils complained of. Accordingly its former order was vacated and no further order was issued.

In another case ¹ which had to do with the difference in rates on corn and corn meal shipped from Kansas points to points in Texas, the Commissioners said:—

We find that the difference in the cost of service in the transportation of corn and corn meal does not exceed three cents per 100 pounds, and that there are no other conditions surrounding the transportation of these two commodities like differences in value, greater liability to injury, etc., which justify a difference in rate of more than three cents.

The last case ² in this group which we shall cite is of much interest, for the decision of the Commission

 $^{^1}$ Board of Railroad Commissioners v. The Atchison, Topeka & Santa Fe R'y Co., 8 I. C. C. Rep. 304.

² Cattle Raisers' Association of Texas v. Missouri, Kansas & Texas R'y Co. et al., 11 I. C. C. Rep. 296.

rests upon a careful balancing of the costs of service, cited by the defense as a reason for high rates, against certain other costs cited by the complainants or discovered as a result of the investigation which would have tended to make low rates on the traffic in question natural and desirable. The case deals with the matter of an advance in rates on live cattle shipped from Texas points to northern ranges and also to the principal cattle markets, Chicago, St. Louis, and Kansas City. The advances in rates had extended over a period of several years; and by 1903, when the complaint was filed, the rates were "higher than any rate ever in effect since rates were filed with the Commission."

The carriers claimed that the rates formerly in force were the result of severe competition and furnished no standard of reasonableness. They defended the existing rates by an elaborate showing as to the costs of service of the cattle traffic as compared to the costs of transporting other commodities. Since the costs cited by them appear in the Commission's decision, presently to be quoted, it will not be necessary to give them at this point. One thing in which both the carriers and the Commission seemed to agree was that the case should be decided on the basis of cost of service. Even the usual practical objection to this method of determining the rate disappears in the light of the Commission's statement that "it is possible to determine with reasonable accuracy the cost of transporting a train of this live stock between any two points," 1

The Commission, however, did discuss other considerations than cost of service which might justify the increase of rates. It discovered that neither the

carriers' need for revenue nor any increase in the value of the commodity transported could legitimately serve as an excuse for the advances. On the contrary the ton-mile revenue from the cattle traffic was greater and the cost of movement no larger than in the case of other freight, while the cost of producing cattle in Texas was greater than at the time the first advances in rates were made. The new rates were not the result of competition but were the result of concerted action on the part of the roads acting through the Southwestern Tariff Committee.

Returning then to the cost of service arguments put forth by the defendants, the Commissioners said:—

These traffic officials all base their opinion upon the assumption that the cost of handling this cattle traffic is much greater than the average cost of handling all traffic. The reasons which they give for this assumption do not, as we have seen, bear examination. They all say that the cattle traffic is more expensive because cattle trains are shorter than other trains, but the testimony in this record shows that they are in fact longer. It is said that the loading of a cattle car is less than the average loading of other freight cars, and, therefore, that the paying revenue of the train in which they are transported is less, but, it appears that while the loading of the individual car is lighter, the revenue freight in the cattle train is as much or more than in the average dead freight train. Other disabilities are pointed out. Some of these are capable of being expressed in dollars and cents as the cost of maintaining pens and shutes, the cost of bedding and disinfecting cars, the cost of loading, the extra hazard peculiar to this species of traffic, etc. These aggregate from one to one and one half cents per hundred pounds. In addition there are certain minor matters like the use of a longer caboose, the return of the attendants, the stopping to feed and water which are not susceptible of any estimate upon this record, but of which the aggregate cannot be large. There is the more important fact that this traffic must be given an express service, but we have seen that the greater expense of providing a fast service depends largely upon the fact that the train loading of revenue freight is lighter, whereas here the loading is at least equal to the average. There is a very substantial disadvantage growing out of the fact that a large percentage of cattle

cars must be returned empty; but here again the difference is less than one would suppose from a casual consideration of the subject. The empty movement in case of all traffic is necessarily large, being some thirty per cent as applied to the entire car mileage of most of the defendants as against forty or forty-five per cent in case of stock cars. This, however, is a substantial disability against this traffic.

If we turn to the rates themselves we find that the average revenue per ton-mile which these stock rates yield is greater in all cases and much greater in some cases than the average rate per ton-mile. We also find that while the average rate per ton-mile in case of all these defendants decreased materially from 1892 to 1903 these stock rates, even before the advances of 1903, had in most cases increased. . . . The cost of operation has increased in some respects, but this has been more than offset by the introduction of improved methods and especially by the large increase in the volume of the traffic.

The Commission accordingly reached the conclusion that the advances in rates made during 1903 were unjust and unreasonable and that the existing rates were therefore "unjust and unreasonable by the amount of said advances." The carriers having made their defense strictly on the plea that the costs of moving the live stock were higher than for ordinary freight, the Commissioners followed this line of argument and declared that "the average cost of moving live stock is not greater than the average cost of moving all commodities." To show, however, that they fully agreed with the carriers that the decision should be reached on the basis of cost of service arguments. they say: "In determining a reasonable rate the cost of performing the service, as has been just observed, is one element in that rate, and cost of movement is an important item in arriving at the entire cost of service."

There are many other cases in which the Interstate Commerce Commission has made use of the method of comparative costs to enable it to judge of the reasonableness of a given rate. Usually, however, other arguments are relied upon in part, and the cost of service principle is therefore presented in less distinct fashion than in the preceding cases.

3. Comparison with rates elsewhere

A second method of comparison employed by the Commission in certain instances has been to judge of the reasonableness of a given rate by comparing the costs of performing the service with the costs incurred on other roads or on other parts of the same road where the rates were believed to be reasonable. There are not many cases of this sort and they need not long detain us.

Complaint was made in one case 1 that the rate for transporting cotton from Meridian, Mississippi, to New Orleans was too high. The investigation showed that if more than 20 cents per 100 pounds, or about a dollar a bale, were charged, it would be more profitable for shippers to send their cotton to the eastern market by another route. At the same time, it was apparent that such a low rate would be an unprofitable one to the carrier, since, even with the rates then in force, the carrier was earning little more than operating expenses. The Commissioners declared that while the fact that a rate was unremunerative must not be overlooked, this would not justify rates grossly excessive. They decided that the costs of sending cotton from Meridian to New Orleans could not be more than the costs of sending it from Shreveport.

¹ New Orleans Cotton Exchange v. Cincinnati, New Orleans & Texas Pacific R'y Co. et al., 2 I. C. C. Rep. 375; 2 I. C. R. 289.

Louisiana, to New Orleans, where the rate was \$1.50 per bale. The carrier was accordingly ordered to reduce the Meridian-New Orleans rate to \$1.50 per bale.

In another case¹ the defendant carriers had been shipping wheat to market over a route 478 miles in length, having many heavy grades and curves, and had charged 32½ cents per 100 pounds for such shipments. There was, however, a shorter route, only 311 miles in length, having only a few ascending grades and these exceedingly light. Wheat was not sent by this route, altho it would have been much cheaper thus to transport it. The Commissioners held that the rate of $32\frac{1}{2}$ cents might be presumed to be reasonably remunerative over the longer and more expensive route and must therefore be excessive over the less expensive and more direct route. "The complainants," it was said, "have a just and reasonable right to have the products of their farms carried to market by the shortest and least expensive routes at a reasonable through rate."

In the important case of George J. Kindel v. the Boston & Albany Railroad et al.² complaint was made that rates on cotton piece goods in less than car load lots shipped from Boston, New York, and other eastern points, were charged \$2.24 per 100 pounds to Denver, while only \$1.50 per 100 pounds was charged to San Francisco, 1400 to 1600 miles beyond Denver. Car load lots were charged only \$1.00 per 100 pounds to San Francisco but a special car load rate was refused to Denver.

Newland et al. v. The Northern Pacific R. R. Co. et al., 6 I. C. C. Rep. 131; 4 I. C. R. 474.

² 11 I. C. C. Rep. 495.

The Commissioners concluded from their investigation that the low rates to San Francisco were permissible under the circumstances, in order to meet water competition, provided that these rates were not so low as to cause the transportation of such merchandise at a loss and thus compel other traffic to make up this loss. If, however, the existing rates to San Francisco were sufficient to cover costs, then the high rates to Denver which resulted from a combination of several local rates must be regarded as unreasonable. The Commissioners said:—

The actual cost of carriage is ignored, as an element in rate making in this method of charging and collecting the local rates for through shipments. The local rates are fixed by the carriers to cover all terminal expenses on the shorter hauls, charges and delays to the initial and terminal points, and it is not reasonable on a joint through haul, where these terminal delays and expenses are spared at the intermediate points, that such economy in transportation should not be shared by the shipper who must bear the burden of the long 2000 mile haul, and it is unreasonable and unjust on the part of the carriers that the long, uninterrupted through route, even if no through rate is agreed to, should bear the full local rates.

On the supposition then that the \$1.50 rate to San Francisco covered the costs of transportation, the Commissioners claimed that the same rate would prove sufficient to Denver. They remarked:—

It would seem that the \$1.50 must pay a reasonable profit to the carriers and it is our judgment that the rates in question should not exceed that. Surely a rate which pays expenses for a 3400 mile haul will yield reasonable profits for a haul not much above half that distance when the service actually rendered is far the cheaper and easier half of the total haul.

4. Car load and less than car load shipments

The rule that commodities shipped in car load lots usually take lower rates per 100 pounds than when shipped in less than car load quantities itself rests upon the principle of cost of service. This fact has been frequently emphasized by the Interstate Commerce Commission, as in the case of *The Harvard Company v. The Pennsylvania Company et al.* where it is said that the mere fact that one article is shipped in greater quantities than another when there is no considerable difference between them in "bulk, weight, and value," and "in expense of handling and hauling," constitutes no reason for a difference in their rates and classification.

Mere quantity not measured by a recognized unit of quantity adapted to the carriage, and lessening the expense of handling and carriage, cannot be allowed to affect rates in the transportation of property. . . . The lower rate in proportion upon car loads of freight, treating a car load as a unit, than upon the same article in less than a car load does not come within any such principle as this, but is founded altogether on different considerations.

In the following cases the Commissioners make it clear that these "different considerations" pertain to the cost of transportation. Another Standard Oil case ² furnishes the first illustration.

Complaint was made, among other things, that the carrier was charging exceedingly high rates for barrels of oil when shipped in less than car load lots, and these rates were shown to be in many instances more than double the rates on barrels sent in car load

^{1 4} I. C. C. Rep. 212; 3 I. C. R. 257.

 $^{^2}$ W. C. Schofield et al. v. Lake Shore & Michigan Southern R'y Co., 2 I. C. C. Rep. 90 ; 2 I. C. R. 67.

quantities. After hearing the arguments on both sides, the Commissioners decided to sustain the existing difference in rates. They reached this conclusion with great reluctance because the rates on less than car load lots were so high that they seemed to be "in their nature prohibitory." The Commissioners were careful to say that such great differences in the rates would not be permissible in the case of other kinds of freight and were only allowed in the oil traffic because "the cost of service is very considerably less in the case of shipments in car load lots than in the less than car load quantities." The reasons for this great difference in costs were found to be as follows: (1) The shipment by car load goes direct to destination. It is loaded by the shipper and unloaded by the consignee. On the other hand, freight when sent in less than car loads has to be taken out in parcels, and the expense of loading and unloading is performed by the company. (2) In the case of car load lots only one bill of lading is necessary and only one entry is made upon the way-bill. When less than car load lots are taken a separate receipt or bill of lading has to be given to each shipper and a separate entry for each item is made upon the way-bill. (3) The time occupied in transportation is less in the case of car load lots. for smaller shipments must be sent by local freight trains stopping at every station for which there is a shipment. In this way the time occupied in transporting the smaller lots is from two to three times as long as that required for car load lots. (4) In the case of car load lots there is only one collection of freight charges while for the smaller shipments there are as many collections as there are different parcels. (5) In the case of less than car load lots there inevitably

remains vacant space in the cars for which the carrier receives nothing. (6) The risks from loss of fire are greater in the case of oil sent in small lots, for these small shipments are unloaded in the station house, while car load shipments are unloaded at a distant point.

It would be interesting, did space permit, to discuss at length the case of Thurber et al. v. The New York Central & Hudson River Railroad et al., one of the most perplexing cases which have come before the Commission for its decision. The complaint concerned the rates given on groceries shipped in less than car load quantities from New York to retailers in the central and western states. Much lower rates were given on car load shipments, and it was alleged that this discriminated against eastern distributors. Emphasis was placed by the complainants on social considerations, especially the fact that the normal mode of shipment of such commodities was in small packages. They did not deny that some difference might be made in the rates on car load and less than car load quantities, but held that such difference "should be so small as not to consume the commercial profit on the goods." The carriers on the other hand based their defense mainly on the lower cost of handling car load shipments.

The Commissioners denied that it was the business of carriers so to fix their rates as to preserve a commercial profit to manufacturers or jobbers, but they also declared that cost of service was not the controlling principle in this case. The controlling principle was the interest of the general public. The public was

more interested in miscellaneous shipments of groceries than in solid car load shipments. The carriers should accordingly adjust their rates so as to conform to the existing business of the country. At the same time the Commissioners recognized that the car load was a practicable unit of quantity and that if an article moved in sufficient volume it was reasonable to give it a car load classification. The difference between car load and less than car load rates, they said, is "based on the well known fact of a difference in the cost of service by the carrier."

The Commissioners accordingly decided that the carriers were not justified in charging more for car load shipments when a full car load was sent from many consignors to many consignees, than when sent from one consignor to one consignee, but "in the case of smaller shipments to many consignees at many destinations, there is such material difference in the cost of service, in the earnings of cars, and in car detentions, as to justify a higher charge."

In spite, therefore, of the Commissioners' statement that cost of service was not the controlling element in the case, it would appear that, in the final analysis, cost of service determined the Commission's decision with reference to a difference in the rates on car load and less than car load quantities.

In the case of *The Buckeye Buggy Company v. The* C. C. C. & St. L. Railway et al. 1 the Commissioners held that inasmuch as the practice of giving car load rates on buggies had been followed by the carriers and held legitimate because the cost of handling this business was less, the same rule must be applied whether the consignor or consignee was the owner.

The defendants may clearly require that the goods shall be located at one time and place, that but a single bill of lading shall be issued, that the shipment shall be from one consignor to one consignee, but when these goods are so loaded, when by the terms of the sale they become the property of the consignee upon delivery to the carrier, the carrier has no right to inquire whether the consignee obtained his title from one or from several owners. If they accord a car load rating in case the consignor is the owner, they should extend the same privilege when the consignee is the owner.

In the last case 1 which we shall cite to illustrate the application of the cost of service principle, the Commission decided that if \$100 was a reasonable rate for "transporting twenty-five horses, which is about an average car load, together with an attendant, \$99 is too much for transporting four horses with no attendant."

To the average man the unreasonableness of the latter charge would appear to be because the four horses were worth less than twenty-five, and it would seem that this consideration should have appealed to a body of men who had declared "the value of the article carried" to be "the most important element in determining what shall be paid upon it." The Commissioners did not however advance this argument in the present case but explained their decision on the basis of a difference in the cost of service. "The car may perhaps weigh the same in either case, but the total weight of the full car load is considerably more, the actual cost of hauling is more, the expense of unloading and reloading is more." It was accordingly suggested that the defendant so modify its rates as to charge no more than \$72 in the aggregate for transporting four horses, if the rate of \$100 for a full car load remained in force.

¹ C. M. Barrow v. Yazoo & Mississippi Valley R. R. Co, et al., 10 I. C. C. Rep. 333.

Our review of the cases in which differences in the costs of service have been cited by members of the Commission as reasons for differences in rates shows that the Commissioners, as well as the traffic officials of the various railroads, have made much greater use of the cost of service principle than their preliminary utterances would lead us to expect.

It has seldom happened, of course, that an effort has been made to apportion the charges strictly in proportion to the costs of rendering a specific service. It is doubtful, however, whether any class of business men to-day undertake to do this. Their method is rather that followed by the Commissioners in the cases which we have considered. A merchant or manufacturer by comparing the receipts from one department or one line of goods with the outlay for this department and then comparing these net returns with those in other departments, arrives at certain conclusions as to the relative profits from the several lines of business. The fixed expenses chargeable to the business as a whole he assigns in a more or less arbitrary fashion according to labor costs, or to the cost of the material or, even more loosely still, according to floor space, it may be, or according to the amount of sales or the number of employees, or whatever in his business seems to be the best unit of measurement. By carefully comparing the rates of growth of the various departments with the growth of his profits, he is able year by year to correct his former standards of measurement.

In the same way railway managers sometimes apportion their fixed expenses according to the ton-mileage of their different kinds of freight. In applying the comparative method of determining costs and of

fixing charges in accordance thereto it would seem that the Commissioners and the railway officials have been merely pursuing the methods generally known and accepted by most careful business men, and the cost of service principle doubtless is capable of much the same application in the railway business as it is elsewhere, — unless it be in academic treatises on economics.

CHAPTER II

SUMMARY

IV. Distance as a factor in rate making, 69.—1. Rates increase with distance, 73.—2. Modifications of the distance principle, 79.—V. Natural advantages of location, 82.—1. Natural advantages due to lower costs, 85.—2. Natural advantages due to distance, 94.—3. Group rates, 98.—4. Natural advantages due to competition, 105.—VI. Competition as a factor in rate making, 108.—1. Competition between carriers subject to and those not subject to the act to regulate commerce, 110.—2. Competition between carriers subject to the act, 114.—3. Competition between places or sections, 120.

IV. DISTANCE

DISTANCE as a factor in rate making is of importance only as it affects the cost of transportation. It is, of course, never true that costs are in exact proportion to the distance, but it is true that the greater the distance freight is transported, the greater is the cost of carrying it. We might, therefore, have rightly considered distance under the heading of cost of service. But owing to the emphasis which the Commission has often placed upon it as an element in rate making, as well as because there is a respectable school of economists and publicists who believe that distance should play a larger part in rate making than railway men are inclined to accord to it, we shall here give it separate treatment.

The original members of the Commission, very soon after they had begun their work, made it plain that they had no intention of adopting distance as the sole measure of the reasonableness of a given rate. In the case of the La Crosse Manufacturers' & Jobbers' Union v. The Chicago, Milwaukee & St. Paul Railway Company et al.¹, complaint was made to the general effect that rates on certain commodities were not in proportion to the mileage covered by their transportation. To this complaint the Commission made answer as follows:—

It is a matter of general history that when the act to regulate commerce was pending in Congress the mileage basis was suggested but not adopted. Many circumstances sometimes enter, and sometimes compel a carrier to make rates on one line proportionately less than are made on another. The volume of business, the strength of competing forces, the direction of traffic, the convenience of exchange, the relations of carriers to each other, and a multitude of other circumstances, have or may have an important bearing.

While thus disclaiming any desire to put in force a distance tariff, the Commissioners have made it equally plain that distance as an element in fixing railway charges must not be disregarded by carriers, and that upon the railroads rests the responsibility of justifying departures from the rule that rates should increase with the distance travelled. "Distance is not always the controlling element in determining what is a reasonable rate," say the Commissioners, "but there is ordinarily no better measure of railroad service in carrying goods, than the distance they are carried." ²

The Commissioners do not, of course, mean by this statement that rates should ordinarily be proportional to distance. To fix rates in this fashion would be to disregard the very obvious fact that the terminal expenses remain the same whether the freight is transported one mile or many miles. The general

^{1 1} I. C. C. Rep. 629; 2 I. C. R. 9.

² Abbott v. East Tenn., Va. & Ga. R'y Co., 3 I. C. C. Rep. 225; 2 I. C. R. 609.

rule to be applied in determining the extent to which distance should cause an increase in the railway rate has been repeatedly set forth by the Commissioners and it shows very clearly that these gentlemen attach importance to distance only so far as it reflects cost of service. An explicit statement of the fact that distance as an element in transportation owes its importance to cost of service is found in a case 1 where the complainants urged in behalf of their claim the general principle accepted by the Commission that the ratio of rates should decrease with the increase of the distance travelled. In answer to this the Commissioners said:—

This principle is generally acknowledged when the rates are based upon distance and cost of handling and are not affected by other modifying conditions, and its justice arises from the very obvious fact that the expense of transportation does not increase in proportion to the distance, many of the elements which unite to make up the cost of handling freight being the same whether the terminal points be more or less widely separated.

When we turn to a consideration of the cases in which the Commission has made use of distance as an important, if not controlling, element in fixing rates we find that these cases naturally fall into two groups: (1) Those in which the general rule is followed, that as distance increases the aggregate charge should increase but the ton-mile rate should decrease; (2) those in which the importance of distance as a factor in rate making is admitted, but the general rule stated above is modified to meet certain conditions and circumstances.

¹ Lincoln Board of Trade v. Burlington & Missouri River R. R. Co. et al., 2 I. C. C. Rep. 147; 2 I. C. R. 95. Cf. the similar statement in W. B. Farrar v. East Tenn., Va. & Ga. R'y Co., 1 I. C. C. Rep. 480.

1. Rates increase with distance

A case which may be regarded as typical of the entire group is that of The Commercial Club of Omaha v. The Chicago, Rock Island & Pacific Railway Company et al.¹ Omaha and Kansas City, it was shown, were competitors for the trade of the west, southwest and northwest. Because of this competition these cities received the same rates to and from most points in their common territory. For this reason it was claimed on behalf of Omaha that she should receive the same rates to certain points in Texas as were given to her rival, altho Omaha is about 195 miles farther from these Texas towns than is Kansas City and traffic to and from Omaha must pass through Kansas City.

The Commissioners did not discuss the question as to whether Omaha and Kansas City were entitled to the same rates to other points but they held that the existence of such equality in rates constituted no reason why distance should be ignored in fixing rates to the Texas towns. They declared that carriers had "no right to disregard distance and natural advantages, in order to bring about commercial equality," and they cited their earlier decisions to show that this had always been the attitude of the Commission. Some of the complainants had admitted that the rate to Kansas City from the Texas towns was a reasonable one and the Commissioners said that, if this were so, "the charge of the same rate for the continuous haul 195 miles farther on to Omaha would make no allowance for the expense and value of that additional service."

Competition of the same sort was found to exist between Cincinnati and Louisville in the distribution of merchandise to points in the south and southwest. Cincinnati complained that differential rates of from two to ten cents per 100 pounds were given to Louisville as compared to Cincinnati and that this constituted an undue preference in favor of Louisville since the two towns were rival distributing centers.

The carriers defended the differentials on the following grounds: (1) Cincinnati being on the north bank of the Ohio river, the expense of crossing the river, sometimes on toll bridges, made it justifiable to charge her higher rates than were given to Louisville on the south bank of the river. (2) The distance from Cincinnati to the south and southwest was greater than from Louisville. (3) Cincinnati enjoyed a better freight rate than did Louisville on goods brought from the east and could therefore afford to pay a higher rate on these articles when they were sent forward for distribution.

The first point made by the defendants had to do directly with cost of service and, altho it was recognized by the Commissioners as legitimate, we need not now consider it. Concerning the second argument, the Commissioners said:—

It is undoubtedly true that there are many instances in which the element of distance may be overcome by other considerations, but it is equally true that this Commission has always insisted that distance was an important element in the determining of rates, and in the absence of other influences a controlling element. No circumstances are shown by the complainants which should eliminate that element from consideration, or counteract its influence.

The Commissioners did not recognize the third argument made by the defendants as legitimate, but

¹ Freight Bureau of Cincinnati Chamber of Commerce v. Cin., N. O. & Tex. Pac. R. R. Co. et al., 7 I. C. C. Rep. 180.

their answer nevertheless serves to emphasize the importance attached to distance as a determining factor in this case.

We do not give much weight to this consideration, as Cincinnati is entitled to the benefits of location; the fact that it enjoys exceptional advantages in one respect is no reason why it should be subject to discrimination in some other respect. If Cincinnati by reason of its situation can obtain a better rate than Louisville upon merchandise which it brings in for distribution to this southern territory, that is the good fortune of Cincinnati and affords no excuse for an unjust rate upon merchandise when shipped out. There is, however, a degree of justice in the claim that the same rule which is applied in favor of Cincinnati in respect to incoming freight should be applied against it on outgoing freight and that if it obtains the cheaper freight rates because of being situated near the source of its supplies, it ought in the same manner to pay a higher rate by reason of the fact that it is further from the territory in which it sells.

In spite of the emphasis placed on distance, it will be noticed that the Commission is careful to consider it, in both the above cases, as merely one element in the cost of transportation.

The famous Eau Claire case ¹ is of interest to students of railway rates chiefly for other reasons than those we are now considering. But it offers a good illustration of the importance which the Commission is inclined to attach to distance and to the natural advantages of location as elements in rate making.

With reference to distance the defendants had put forth the claim that Eau Claire was paying a lower rate for the transportation of lumber than were the Mississippi river towns, La Crosse and Winona, "in proportion to their respective distances from the common market," which in this case was certain cities on the Missouri river. Since her ton mileage

¹ Eau Claire Board of Trade v. C. M. & St. P. R. R. Co. et al., 5 I. C. C. Rep. 264; 4 I. C. R. 65.

rates were less, Eau Claire, it was said, had no reason to complain. To this the Commissioners replied as follows:—

The doctrine that transportation charges should be in proportion to the distance between different points, when these distances are greatly dissimilar, has never been advanced by the railroads or recognized by the Commission. It may be the rule to which tariff construction will some time approximate, but there is no opportunity for its application under the present conditions. The fixing of a rate for a thousand miles at twice the sum prescribed for half the distance would be most arbitrary and intolerable. . . . The whole practice of rate making is opposed to the principle of exact proportion, and even in theory there is little reason for its adoption. But distance, nevertheless, is an ever present element of the problem of rates, and not unfrequently a controlling consideration. Where all the distances brought into comparison are considerable and the difference between them relatively small, we shall expect substantial similarity in their respective rates unless other modifying circumstances justify a disparity.

Probably most of the cases in which the Commission has felt obliged to insist upon the recognition of distance as an element in rate making have arisen under the fourth section of the original act to regulate commerce which contains the well-known long and short haul clause. Carriers have advanced a great variety of considerations to show that they should be relieved from the operation of this section. The Commission has invariably taken the position that upon the carrier falls the burden of proving that dissimilar circumstances and conditions exist in the case of the long haul which make it necessary to charge less than for the short haul. In the absence of such dissimilar circumstances and conditions the element of distance must be considered as a controlling factor. is made clear in the case of The Farrar Lumber Company v. Southern Railway Company et al.1, where the complaint was to the effect that rates on lumber from Dalton, Georgia, to certain points in Virginia and West Virginia were higher than to other points further distant on the same line. The carriers pleaded competition as a reason for making the low rates on the long distance traffic. The Commissioners, after investigation, decided that the plea was not warranted under the circumstances and said:—

The rate per ton-mile is not always the measure of a reasonable rate and rigidly applied would make distance alone the gauge for transportation charges, but it is always valuable as affording a basis of comparison for relative rate burdens.

Even when the conditions surrounding the long haul are dissimilar from those present in the case of the shorter haul, they may not be such as to warrant the carriers disregarding altogether the question of distance. In the case of S. Marten v. The Louisville & Nashville Railroad Company, 1 complaint was made that higher rates were charged for transporting lumber from certain small places in Tennessee to Detroit, Michigan, than were charged from Nashville to Detroit, tho the points in question were from 23 to 100 miles nearer Detroit than was Nashville. The carriers defended the lower rates from Nashville on the basis of both rail and water competition. Particular emphasis was placed on the competition by rail, and the defendants seemed to think that the decision of the U.S. Supreme Court in the Troy case (168 U.S. 144) had made it unnecessary to consider the element of distance where competition existed. The Commissioners admitted that competition existed at Nashville, but said that the water competition "would scarcely be a potent factor if the rates were somewhat higher"; and as to the rail competition they said that the defendants made the rate at Nashville and "other rail carriers there simply follow that rate." A decision of the United States Supreme Court 1 was quoted to show that competition to be relied upon must "be not artificial or merely conjectured but material and substantial."

As to the justice of the carriers' claim that distance might be utterly disregarded whenever it was shown that competition existed, the Commission quoted with approval one of its early decisions in which its chairman, Judge Cooley, had said that "while the act does not require all rates to be proportional [to distance] it nevertheless makes the element of proportion an important one when the rates from any locality are to be determined." The application of this principle to the case under consideration is stated as follows:—

Under these circumstances, the rule that after substantial dissimilarity of circumstances and conditions has been shown, the longer distance rate cannot in any case or to any extent be considered by way of comparison in determining whether or not the shorter distance rate is unreasonable or unduly prejudicial, particularly when, as in this case, competition and other compulsory conditions are not found to justify the whole disparity between the shorter and longer distance rates, would be to reject a most appropriate and necessary test of the reasonableness and justice of railway charges. It seems to us that in a case involving shorter distance charges higher than those to and from long distance points, the carrier cannot rightfully claim justification for a greater dissimilarity in the rates than may be indicated by the ascertained dissimilarity in circumstances and conditions.

This case and the Eau Claire case both show that the Commission is inclined to attach much importance to distance as a measure of the reasonableness of rates from two or more competitive points whenever these competitive points are in the same territory and are about equally distant from a common market.

¹ Louisville & Nashville Railroad Company v. Behlmer, 175 U. S. 648.

2. Modifications of the distance principle

Altho laying much emphasis on the general rule that the aggregate rate continues to increase as the distance covered in transportation increases, while the ton-mile rate constantly grows less, the Commissioners are willing to admit that this rule cannot always be applied even in those cases where distance itself is not to be ignored as an element in rate making.

One instance in which "the rule that the rate per ton-mile must be less for the greater distance" need not apply is where competition with a water route (or a railroad not subject to the act) is present in the case of the short haul, but not present in the case of the long haul. Such instances are less frequent than those in which the competition exists in case of the long haul, but they are occasionally found.

In such instances the Commission has held that competition in the case of the short haul may make the rate unusually low, "often too low to be treated as a fair criterion for points beyond." The railroad having a long mileage to a given point may be met by a railroad having a much shorter mileage, and setting the rate which must be met if the longer road would share the business.

When the given point is passed [the longer road] may fairly increase its charges with some consideration of the absolute distance travelled by its own lines from the originating point and in a ratio more rapid than the proportionate charges would have otherwise shown had it been able to grade its rates continuously throughout its line. The same effect is at times produced by water transportation, competition, and other controlling causes.²

¹ Business Men's Association of the State of Minnesota v. C., St. P., M. & O. R'y Co., 2 I. C. C. Rep. 52; 2 I. C. R. 41.

 $^{^2}$ Lincoln Board of Trade v. Burlington & Missouri River R. R. Co. et al., $\,2$ I. C. C. Rep. 147; $\,2$ I. C. R. 95.

In determining whether or not the general rule should be held applicable we must also consider, say the Commissioners, the extent of the traffic and the character of the country traversed. The ratio of rates charged through sparsely settled districts cannot decrease in proportion to the distance without depriving the carrier of necessary revenue; a region whose interests are wholly agricultural does not offer the possibilities of tariff reduction that is afforded by regions which are largely fed by mineral resources, quarries, and manufactures.

The Commission has also decided that the mileage is an element of importance in making rates, the principle that the ton-mile rate decreases with the distance travelled "cannot as a rule be considered as a test in railroad operations in case of local rates," 2 and local rates need not necessarily correspond with the division of the joint through rate over the same line 3

It has also been held that whenever a comparison is made between distances varying greatly in length, the ton-mile rate in one case need not necessarily be regarded as a measure of the reasonableness of the rate in the other case. That this is the Commission's point of view was shown by its utterances in the Eau Claire case, but is more fully brought out in the case of the Board of Railroad Commissioners of the State of Kansas v. Atchison, Topeka & Santa Fe Railway Company et al.,4 a case which is peculiar in this respect, that the principle which the complain-

¹ Ibid.

² Business Men's Association of the State of Minnesota v. C. & N. W. R'y Co., 2 I. C. C. Rep. 73; 2 I. C. R. 48.

³ H. McMorran and E. B. Harrington v. Grand Trunk R'y Co. of Canada et al., 3 I. C. C. Rep. 252; 2 I. C. R. 604.

^{4 8} I. C. C. Rep. 304.

ants wished to have applied in one instance they were unwilling to see made applicable in the other matter made the subject of dispute.

The complaint was (1) that lower ton-mile rates were given from the Kansas grain fields to Galveston, Texas, than were given on grain shipments to Kansas City and St. Louis, and (2) that lower ton-mile rates were given on Kansas grain sent to the Atlantic seaboard than on that sent to the Gulf ports which were the natural points of export for Kansas grain. The Kansas Commissioners asked that the same ton-mile rates be given to Kansas City and St. Louis as were given to Galveston, and that in turn the Galveston rate be not higher than the rates to the Atlantic seaboard. Concerning the Kansas City and St. Louis rates the Interstate Commerce Commissioners said:—

Distance is undoubtedly a factor, and perhaps ought to be a much more important factor, in the determination of rates, but in the present case where the distances from the grain fields of Kansas to Kansas City, St. Louis, and Galveston vary from 100 to 1000 miles, any attempt to adjust the rates on grain to those cities upon the sole basis of the rate per ton per mile would be impracticable.

The Commissioners were also unwilling to admit the claim of the complainants that the Galveston rates should be made as low as those to the Atlantic ports.

If a lower rate per ton-mile is made toward the east than toward the south, it is for the purpose of enabling the same grain to reach the same foreign markets by a different route and through different intermediate markets. The grain producer of Kansas has a satisfactory rate to the foreign market through Galveston. Can it be claimed that he is injured by a rate which gives him two routes instead of one to the ultimate market and two intermediate markets instead of one?

The reader has doubtless observed that in all these cases in which the Commission has emphasized dis-

tance as an influential factor in the determination of a rate, it has been because differences in distance seemed to express differences in the cost of service. Tho it may not be so obvious in cases where the distance principle has been modified or held to be not the controlling factor, the Commissioners have nevertheless had the cost of service principle in mind. The cases mentioned have had to do either with local rates, where costs of handling made the rates disproportionately high, or with low rates which were forced on the carrier by the competition of other carriers, either rail or water. A little reflection will show that the low rates in these latter cases have been determined by the cost of conducting the business by the cheaper route. Viewed from purely an economic standpoint it may be questioned whether the more expensive route should have been allowed to participate in the traffic under such circumstances. Over this matter, however, the Interstate Commerce Commission has had no control. The act to regulate commerce was enacted by a body of men who believed in giving full scope to the principle of competition and the Federal courts have fully sustained them in this position, even in cases where the Commission has felt that competition was unwarranted.

V. NATURAL ADVANTAGES OF LOCATION

The question as to how far, in the making of rates, recognition should be given to the natural advantages possessed by a given place for the production or marketing of certain commodities has received much discussion by the Commission, and some of its most important decisions have been based upon the principle here involved. The practice of the railroads has

often been to ignore these natural advantages; at other times the carriers have attempted to equalize them. This result, tho sometimes due to competition between the railroads themselves, has been due more often to competition between markets or between places of production. The carrier leading to a certain market or from a certain center of production has felt pressure to make rates as low as, or lower than, those given to competing centers of trade or production. This concession by the carrier has in turn led to efforts on the part of other places to induce the roads serving them to reduce rates so as to meet this competition. The final result has oftentimes been that the carriers have entered into arrangements whereby they agree to equalize the advantages of competing towns by fixing the rates in inverse ratio to the natural advantages of these towns, enabling all competing localities to market their products at the same prices at the same or different points of distribution.

The Interstate Commerce Commission has always been slow to admit the claim of the railroads that it was necessary and proper to make such rates as would equalize the natural inequalities of competing points and put them all on an equal footing in the common market. "A place is entitled to its natural advantages," say the Commissioners, "and a carrier may not deprive it of these advantages which fairly belong to it and because of which investments have been made at this point for the purpose of carrying on production in a more profitable manner than could be done elsewhere." ¹

A little reflection will show that the principle of making rates which recognizes the right of a place

¹ Imperial Coal Company v. Pittsburg & Lake Erie Railroad Company et al., 2 I. C. C. Rep. 618; 2 I. C. R. 436.

to its natural advantages is nothing more than a corollary of the cost of service principle. Other things being equal, a place having natural advantages for the production of a given commodity will produce that commodity and will be able to undersell other places, unless the carrier charges more for transportation from this point to the common market than is charged from competing points of production. Cost of production must, of course, include the cost of transportation and if a place which possesses advantages for the production of a commodity is nevertheless at a disadvantage as compared to its competitors, owing to greater distance from the market, its apparent advantages are offset by the greater cost of reaching the market. To allow a railroad to make higher charges from the more distant point under such circumstances is quite a different matter from acknowledging the carrier's right to make such charges when there is no greater cost of transportation.

The Commission has been consistent in its application of the principle that a place is entitled to the full advantage to be derived from a favorable geographical situation, but has insisted that this must not be construed to mean that a place is entitled to monopolize a given market, or to raise prices in that market above the cost of securing commodities elsewhere. In other words, natural advantages mean differential advantages, not monopoly advantages. The cases coming before the Commission which afford an illustration of the application of this principle may be divided into four classes: (1) Where the natural advantages are due to lower costs. (2) Where they are due to a shorter distance covered in transportation. (3) Where group rates are involved. (4) Where the natural advantages result from competition.

1. Natural advantages due to lower costs

In the case of the Boston Chamber of Commerce v. the Lake Shore & Michigan Southern Railroad Company et al.1, the petitioners asked that the railroads from the west be required to make the same rates on goods transported from Chicago and other western points to Boston when these goods were intended for domestic consumption as when intended for exportation. To understand the case fully, it must be said that, in an earlier case 2 which had come before the Commission. Boston exporters had asked that their city be given the same rates on goods intended for export as were given to New York and had urged that unless this were done Boston would lose its export trade. The Commissioners, for reasons not necessary to relate here, had made this concession to Boston. The Boston Chamber of Commerce was now using the concession as a basis for demanding that the same rates should be made on all commodities sent to Boston, whether intended for exportation or for domestic consumption. The argument of the petitioners was that the cost of transporting the commodities was the same, regardless of their use, and that the carriers made no such distinction between domestic and export traffic at New York, Philadelphia. and other places.

The Commissioners refused to allow the request of the petitioners and declared that cost of service was not the main consideration in fixing rates. "The element of cost of service which may at one period have been recognized as controlling in fixing rates has long ceased to be regarded as the sole or most important factor for that purpose."

¹ 1 I. C. C. Rep. 436; 1 I. C. R. 754.

The real grounds for making lower rates to New York than to Boston, said the Commissioners, are the natural advantages possessed by the former place over those possessed by the latter.

If differences in the condition of traffic to two or more points exist which materially affect the cost or value of the service, it would scarcely be reasonable to require a carrier to disregard these differences and make good to every community the disadvantage of situation or other disadvantages.

Altho the Commission denies the validity of the cost of service principle in this case when applied to the question of relative rates on domestic and export traffic, it will be noted that New York's advantage of situation as compared to that of Boston is shown to rest on differences in the cost of transporting goods to the two cities. This is brought out more fully when the Commission recites the points in which New York's situation is declared to be superior to that of Boston: (1) There is more switching involved at Albany in the case of Boston traffic. (2) The heavy grades of the Boston and Albany railroads necessitate smaller trains. (3) The cars are detained longer in Boston than in New York. (4) The distance from Albany to Boston is 56 miles greater than to New York, (5) The volume of business to Boston is smaller and "the universally accepted principle of railroad transportation that a very large traffic can be profitably conducted at lower rates than a relatively smaller traffic "applies. (6) Competition by way of the Great Lakes, the Erie Canal, and the Hudson river exists in the case of New York and compels the carriers to accept a lower rate to that city than they would be willing to accept in the absence of such competition.

All of these points, with the exception of the last, have to do with differences in the cost of service.

Together they give New York a decided advantage over Boston, and according to the Commissioners they are "physical facts constituting inequality which the carriers by rail are not required to make good to the less favored locality at their own expense."

The low rates given to Boston on her export traffic were declared to constitute an exception to the ordinary rate and to be a distinct *concession* on the part of the carriers to put Boston exporters on an equality with their competitors at New York, Philadelphia, and Baltimore.

We have already observed, under the heading of "Distance," that in the Eau Claire lumber case 1. the Commissioners held that, Eau Claire being about the same distance from her market, the Missouri river towns, as were her competitors, La Crosse and Winona, it was incumbent on the carriers to consider distance as an element to be taken into account in determining the relative rates from these competing points of production But the main thing emphasized by the Commission in its decision was the fact that Eau Claire had such natural advantages for producing and shipping lumber that she could produce and market this commodity at less cost than could her competitors and that the system of rates in force deprived Eau Claire of these natural advantages in order that competing localities might meet her on equal terms in the common market. The favorable situation enjoyed by Eau Claire is thus described by the Commission: -

Eau Claire appears to be adapted by location and in other respects for the manufacture and sale of lumber: it has a natural booming ground or place for the safe storage of logs, cheap transportation

¹ Eau Claire Board of Trade v. C. M. and St. P. R'y Co. et al., 5 I. C. C. Rep. 264; 4 I. C. R. 65.

from the stump to the mills, proximity to the timber, and locations suitable for mills and yards. Being situated nearer the pine forests, the sources of timber supply, and at the confluence of two rivers which penetrate those forests, the Eau Claire and Chippewa, it appears to have natural advantages over its neighboring competitors [La Crosse and Winona]. . . After lumber is in the raft, the cost of its transportation by water down the Mississippi is less than for the same distance by rail; but, including the rafting and preceding expenses, the testimony is to the effect that lumber can be shipped from Eau Claire by rail direct to Missouri river markets at as little, if not less, cost than it can be floated to Mississippi river points [La Crosse and Winona] and thence transported by rail to those markets.

The long controversy between the roads as to what differences in the rates on lumber from these competing towns should prevail had been referred by the roads to a gentleman named Bogue, who had been called upon to act as arbiter in the dispute. The decision rendered by Mr. Bogue was in accordance with the principle suggested by his own question: "What rate will enable each line party to this arbitration to place its fair proportion of lumber in the territory under consideration?" This, say the Commissioners, is equivalent to asking, what rate is necessary to equalize the relative disadvantages of location possessed by La Crosse and Winona as compared to Eau Claire? That this was also the understanding of the carriers is shown by the statement of the traffic manager of the St. Paul road that

primarily the object of the Bogue award was to place each line in a position to carry its fair share of the Missouri river lumber, and further to place each manufacturing locality upon an even footing with its competitors If Eau Claire could produce lumber cheaper than Winona or La Crosse, the latter points were to have a lower rate so as to enable them to compete.

The principle thus applied in arbitrating the dispute did not meet with the approval of the Commissioners. They said:—

We are not to be understood as endorsing this principle. On the contrary, we consider it radically unsound. That rates should be fixed in inverse proportion to the natural advantages of competing towns with a view of equalizing commercial conditions as they are sometimes described, is a proposition unsupported by law and quite at variance with every consideration of justice. Each community is entitled to the benefits arising from its location and natural conditions, and any exaction of charges unreasonable in themselves or relatively unjust by which those benefits are neutralized or impaired contravenes alike the provisions and the policy of the statute.

The Commission therefore ordered such a reduction in the lumber rates from Eau Claire as should cause these rates to exceed those from La Crosse and Winona by not more than $2\frac{1}{2}$ cents per 100 pounds. The selection of this particular differential was admitted to be more or less arbitrary and was left subject to correction. But the principle involved was that the rates should be such as to preserve for Eau Claire her natural advantages for securing and handling lumber, and should impose upon her shippers no higher rates in sending this forward to market than were justified by a consideration of the relative distances of Eau Claire, Winona, and La Crosse from the common markets.

In two cases,¹ brought before the Commission by the freight bureaus of Cincinnati and Chicago against certain southern and western roads, and heard together, complaint was made that the roads running south from the Ohio river had so arranged their rates on manufactured goods as to favor the merchants in eastern seaboard territory (north of the Potomac river and east of the Appalachian mountains) and to give to them an "undue and unreasonable preference or advantage" over the merchants in central territory

¹ Freight Bureau of Cincinnati v. Cin. N. O. & Tex. Pac. R'y Co.; Chicago Freight Bureau v. L. N. A. & C. R'y Co. et al., 6 I. C. C. Rep. 195; 4 I. C. R. 592.

(north of the Ohio river and lying between the Appalachian mountains and the Mississippi river). The evidence submitted showed that the mileage rates on articles in classes one to six inclusive, of the Official Classification, were higher from the eastern territory into the south than from the central territory. The defendant carriers offered as an excuse for this discrimination the existence of water and rail competition from New York, Philadelphia, and Baltimore, but the Commission discovered that the rates from the east were lower than were necessitated by water competition.

The real grounds of the discrimination were found to lie in an agreement made in 1878 by the roads running into the south, the consequence of a long and bitter struggle between the lines from the east to the south and those from the west to the south. In order to end this struggle the Southern Railway and Steamship Association had been formed, whose object was

"to protect to eastern lines the business peculiar to their territory" and to the western lines the business relating to "their peculiar commodities," . . . in other words to secure to eastern lines the transportation of "articles manufactured in the east and in other countries and imported into eastern cities, embraced under the general terms of dry goods, groceries, crockery and hardware" and classified for the most part under the first four of the numbered classes, and to the western lines the transportation of "articles of western produce, comprising the produce of animals and the field" and embraced principally in the lettered classes.

As a result of this agreement rates were so fixed that on commodities produced mainly in western territory an advantage of at least ten cents per 100 pounds was given to the western lines over those from the east, while on articles peculiar to the east rates correspondingly low were permitted to the

eastern lines; all with a view to effect the announced object of the convention.

The Commissioners decided that however plausible may have been the pretext for such a method of adjusting rates in 1878, that justification no longer existed; for "it is estimated that the manufacture, in the central territory, of goods in the numbered classes has increased 100 per cent in twenty years." They were not willing to admit, however, that even in 1878 such an adjustment of rates was justifiable.

It is not the duty of carriers, nor is it proper, that they undertake by adjustment of rates, or otherwise, to impair or neutralize the natural commercial advantages resulting from location or other favorable conditions of one territory, in order to put another territory on an equal footing with it in a common market. Each locality competing with others in a common market is entitled to reasonable and just rates at the hands of the carriers serving it and to the benefit of all its natural advantages.

The Commission, therefore, proceeded to order a reduction of the maximum rates on commodities in classes one to six, inclusive, from Chicago and Cincinnati to southern territory on the following basis:—

The cost of freight in general per ton per mile on the roads south of the [Ohio] river appears to have been for the years named in the tables heretofore given about 25% on an average greater than the cost per ton per mile on the roads from Chicago to the river. The tonnage of the latter roads is also greater than that of the former. Rates from Cincinnati to southern territory from 33% to 50% higher per ton per mile than those from Chicago to Cincinnati and other Ohio river crossings will in our opinion make full allowance for these differences in cost and tonnage, and be at least not unreasonably low as maximum rates.

It appears from this statement that while the Commission concedes the right of a certain territory to the advantages arising from its favorable situation with reference to a market, the degree to which these

advantages are recognized is determined by a strict adherence to the cost of service principle.

Distance, competition, and cost of service are all made use of by the Commission in reading a decision In the Matter of the Transportation of Salt from points in Michigan to Missouri River Points, but the emphasis placed on natural advantages of location makes it desirable to treat the case under this heading.

Salt producers in and around Detroit, Michigan, were inclined to complain of the combination of rates made between a boat line on Lake Michigan owned, or at least controlled, by the International Salt Company and the railroads running from Chicago. These combination rates enabled salt to be carried from its point of production near Ludington and Manistee, Michigan, to its markets on the Missouri river at rates lower than were given to the Detroit producers by the roads leading from that city. The boat line received from 30 to $33\frac{1}{3}$ per cent of the through rate.

In spite of the suspicious elements involved in the case the Commission concluded, after investigation, that this apparently large percentage received by the boat line was justified by the cost of the service which it rendered in connection with the transportation of salt and by competitive conditions over which the roads at Chicago had no control.

The consideration which had most weight with the Commission in causing it to justify the existing rates was the fact that Ludington and Manistee apparently enjoyed natural advantages of production and location which enabled them to produce salt and ship it to the Missouri river at less expense than could producers at Detroit. (1) They were 250 miles nearer to the western markets. (2) They

had the advantage of a combined rail and water route, whereas Detroit must ship by an all-rail route. (3) Their costs of manufacturing salt were from 75 to 90 cents less per ton than those at Detroit. (4) They had the advantage of shipping by way either of Milwaukee or Chicago, and hence enjoyed competition on the part of the carriers leading from those cities.

The Detroit producers did not contend that the rates from Detroit were in themselves unreasonable, nor did the Commission so find them to be. The only way, therefore, in which Detroit could find relief was either by a voluntary reduction of rates on the part of carriers transporting salt from Detroit or by a condemnation of the division of the through rate awarded to the boat company. This latter alternative, however, would result in higher rates on salt from northern Michigan and this in turn would raise the price of salt to western consumers. The Commission said:—

We do not conceive it to be our duty to take away from Manistee and Ludington the natural advantages which they enjoy and place them on an equity with Detroit in the manufacture and shipment of salt, in order that the price of that article in western territory may be increased, thereby enabling Detroit producers to do business at a profit in that market. It is the duty of the Commissioners to keep in view not only the rights and interests

of producers, but those of the consumers as well.

It can be no duty of the Commission to equalize natural advantages between localities through the adjustment of tariff rates. If any carrier desires to foster languishing industries situated on its line for the purpose of increasing the traffic of such carrier, it has, we think, the right to do so; and if the roads leading west from Detroit, with their connections, wish to make a rate whereby the salt producers of Detroit may be enabled to market their product on the Missouri river, they are so privileged; but this fact can in no wise affect the through rate from Manistee and Ludington, nor can it in any way determine the reasonableness of the division received by the boat line.

It is clear that the decision of the Commission in this case was based primarily on the principle of preserving the natural advantages of location. It is also clear that these natural advantages possessed by Ludington and Manistee were due to the fact that they could produce salt and put it in the Missouri river territory at less expense than could the salt producers in and about Detroit. But since their ability to do so was dependent upon the maintenance of a boat line on Lake Michigan and the granting to this boat line of a large percentage of the through rate, it may not be so clear to the reader that the granting of this large percentage was itself warranted by considerations affecting the cost of service. may be explained, therefore, that the apparently large percentage received by the boat line covered a number of expense items other than transportation, such as dockage charges, pay for stowing and unloading, cooperage charges, insurance fees, and some minor items. In view of this extensive service performed, the share of the through rate received by the boat line did not appear to the Commissioners to be excessive and it further appeared that the ownership of the boat line by the International Salt Company grew out of the fact that otherwise there would have been a lack of adequate shipping facilities from northern Michigan points.

2. Natural advantages due to distance

Since distance is merely one element in the cost of transportation, it follows that a place which enjoys natural advantages of location because it is nearer the market or its source of supplies than are its competitors, will be able, other things equal, to produce and market its products at less expense than can competing localities. The same reasons, however, which led us to treat distance as a separate factor in rate making make it desirable to consider separately those cases in which natural advantages arise from differences in distance.

The natural advantage which a short distance point has over a long distance one is so obvious that the cases illustrating this point can be very briefly treated.

In the case of The Anthony Salt Company et al. v. The Missouri Pacific Railway Company et al.¹, one question at issue was whether salt from Michigan might be given a rate to points in Texas as low as that given to salt-producing regions in Kansas. It was discovered that the rate on Michigan salt as far as St. Louis was determined by conditions over which the defendants had no control. The Commissioners therefore treated the rate to St. Louis as merely "an element of the original cost" of preparing the Michigan salt for market and in judging as to the proper relation between rates on Kansas salt and Michigan salt made the comparison between rates to the Texas points from St. Louis and Hutchinson, Kansas, respectively.

St. Louis is 743 miles from Ft. Worth, Texas; Hutchinson is 427 miles from the same point. If the common rate $35\frac{1}{2}$ cents per hundred is the proper rate for the 427 miles haul from Hutchinson to Ft. Worth, then the excess of haul from St. Louis to Ft. Worth, which is 316 miles, without any reason shown in the record, is a carriage without charge. While many other considerations than distance may be considered in determining what shall constitute a proper rate, yet in this case nothing is shown to justify the apparent discrepancy of charge, and it is believed to work an undue preference to Michigan salt over Kansas salt going to Texas and southerly points.

It can hardly be disputed that here is a disadvantage brought about to the Kansas, and a preference given to the Michigan salt, both undue and unreasonable. . . . We see nothing in the situation, as proven, which can be given as a valid reason for not putting the Kansas salt fields in possession of all these natural advantages in the territory traversed by these lines. We think that in all this territory where the Texas points are as near to Hutchinson as to St. Louis, the Kansas salt should, by a rearrangement of rates, be carried for an equal charge and where Hutchinson is nearer than St. Louis, the Kansas salt should have the reasonable advantage of its proximity to the market.

The danger that such a rearrangement of rates would give to Kansas salt producers monopolistic power, enabling them to raise the price of salt to Texas consumers, seems to have been forestalled by the Commission's discovery that the productive capacity of the Kansas salt fields was "practically unmeasured, and probably equal to any demand that is likely to exist for the product."

In the case of the Colorado Fuel and Iron Company v. The Southern Pacific Company et al. 1, complaint was made that a rate of \$1.60 per 100 pounds on certain iron and steel products shipped from Pueblo, Colorado, to San Francisco was unfair and unreasonable when compared to the rate of 60 cents or less per 100 pounds on the same iron and steel when shipped to San Francisco from Chicago and from Mississippi and Missouri river points. Many considerations, such as cost of service, competition by water, value of commodity, and social considerations, played a part in the discussion and affected more or less the decision of the Commissioners. On the whole, however, the discrimination was shown to be due primarily to a desire on the part of the carriers to equalize the natural disadvantages of location held by eastern producers of iron and steel with reference to the western markets. This method of rate making did not, of course, commend itself to the Commissioners, who declared: "The off-setting of natural disadvantages at one place as compared to like business at another, by discrimination in freight charges, is inconsistent with the equality provisions of the statute." Pueblo had certain disadvantages for producing and shipping steel, - inferiority of coal and iron ore, high cost of labor, and high terminal charges; but these did not outweigh her natural advantages due to location. As a result, a large iron and steel industry had sprung up the financial success of which was in large measure dependent on its ability to retain its advantages over its competitors in the western markets. This natural advantage due to less distance the Commission concluded the Pueblo company had a right to retain. After allowing for the greater terminal expenses, when compared with the distance the commodities were hauled, it was decided that

the rates from Pueblo to San Francisco should not exceed 45 cents per 100 lbs. on steel rails and railway fastenings, or $37\frac{1}{2}$ cents per 100 lbs. on bar iron, cast iron water pipe, etc., nor should the rates from Pueblo to San Francisco on such traffic or on other iron and steel articles be greater at any time than 75 per cent of rates contemporaneously in force on like traffic from Chicago to San Francisco over any of the different roads.

The basing-point system of rate making generally followed in the southeastern section of the country affords numerous examples of discrimination against the shorter distance points. The Commission has justified these discriminations wherever active water competition has seemed to compel lower rates to the long distance points, and it has also been compelled by court decisions to uphold these discriminations wherever active rail competition has proved a potent factor. But the Commission has acted very un-

willingly in so deciding, and it has thrown upon the carriers the responsibility of showing that circumstances and conditions were so dissimilar as to warrant the lower charges to the long distance point.

In the Cordele Machine Shop case 1 the Commission decided that the fact that the more distant point was a greater producing and distributing center might be due to no natural advantages possessed by this place but merely to the fact that it was arbitrarily made a favorite by the carrier.

In the Hampton, Florida, case ² the carriers had been charging rates to that city which were made up of the through rate to Palatka, a point beyond Hampton, plus the local rate back to Hampton. Water competition at Palatka was said to control the rate at that point but this the Commission did not find to be the case, and it declared that under the circumstances the basing-point system of rate making was unfair to surrounding localities because the effect of such a system

is to enable the basing-point merchants to compete with the local merchants at their own doors on equal terms, while the latter are debarred from such competition with the former, and as to territory intermediate between the basing points and surrounding localities merchants at the basing points are given such an advantage in rates as to enable them to undersell merchants at surrounding localities and drive them out of the jobbing business in such intermediate territory.

3. Group rates

No cases which have come before the Commission better illustrate the application of the principle that a place is entitled to the advantages of its geographical location but is not entitled to push this claim beyond

¹ Cordele Machine Shop v. L. & N. R. R. Co. et al., 6 I. C. C. Rep. 361.

² Board of Trade of Hampton, Fla. v. N. C. & St. L. R'y Co., 8 I. C. C. Rep. 503.

the bounds set by cost of service, than do those cases which deal with group rates, that is, rates which are common to all points within a given area which are reached by the same lines, irrespective of their distance from the basing point. Such a system of rate making is exemplified in the zone tariffs of Austria and Hungary, where the principle of group rates may be said to have found its logical application.

In one of the earliest cases 1 of this sort heard by the Commission it was shown that the carriers were in the habit of making uniform rates on milk transported to New York from points on their lines which were situated at distances varying from 21 to 183 miles from the point of destination. The complainants urged that in this way undue preference was given to the more remote points, inasmuch as the amount of service rendered to these places was greater than that given to the points nearer the market altho the charge was made the same for all. The complainants were apparently seeking to make use of the value of service principle which the Commission had already declared to be the fundamental principle in rate making. Unfortunately for their cause, the complainants in their brief made the following admission with reference to the costs of conducting the business of transporting milk: —

It will be observed that the character of the service rendered is the same and every element which goes to make up the expense account of the railroad for performing this service is identically the same whether the milk is taken to its cars 183 miles from New York or 21 miles from New York, except in the length of the haul.

This admission the Commissioners took advantage of to bolster up their decision that the group rate

¹ N. W. Howell et al. v. N. Y., L. E. & W. R. R. Co. et al., 2 I. C. C. Rep. 272; 2 I. C. R. 162.

was justifiable in this case, since the greater part of the expense of transporting milk by special trains was independent of distance.

The special equipment and trains, the extra labor and cars, the terminal services and supervision, are all employed upon the milk business as a unity . . . and it may well be doubted whether the length of the haul establishes in this case any very material difference between the expenses at the different localities.

The Commission's decision was accordingly made to rest on the basis of cost of service; and the case would have been treated under this heading were it not for the fact that in a later case the Commissioners shifted their ground and, altho they did not admit that there was any inconsistency, practically reversed their decision.

In the later case ¹ much the same situation was revealed, but in this instance the blanket rate on milk and cream shipped by special milk trains applied to all places within 335 miles from New York by some of the defendant lines. The complainants were careful not to weaken their case as they did in the former instance by admitting that the cost of service was practically the same from the more distant points as from those near at hand. On the contrary, they declared that the rates

are purely arbitrary and are not at all grounded upon the distance of the terminal from the shipping points, nor based to any extent upon the value of the products carried or upon the cost of carriage to the defendants, or upon any special service rendered.

They also declared that the milk rates were higher than for other farm products whose character was the same and whose costs and risks of transportation were greater. Yet the real burden of their complaint,

 $^{^1\,}$ Milk Producers' Protective Association v. D., L. & W. R. R. Co. et al., 7 I. C. G. Rep. 92.

tho it was not boldly stated, was that the blanket rate took from those shippers who lived near New York their geographic advantage of situation near a market.

The defendants in their answer laid stress on this argument, through an exaggeration of statement, when they alleged that the object of the petition was to create

a monopoly of the milk business in favor of a limited class of shippers by securing lower rates to them than are granted to more distant shippers, the practical effect of which will be to drive the latter out of business and thus enable the petitioner and those it represents to secure higher prices from the consumers.

The carriers presented a strong argument in support of the group rates on milk, which they contended were better for consumers as well as producers than were rates based on distance.

The Commissioners made an elaborate investigation of the facts concerning the distances of the various milk-shipping stations from New York and the amounts of milk shipped from each station, of the methods of packing milk and the cost of moving the milk traffic, of the amount of milk handled by each line and the rates charged on other farm produce. result was that they decided against the continuance of the blanket rate on milk from all points within 335 miles, altho they still upheld the principle of group rates. In place of the one uniform rate from all points on the defendants' lines they suggested the following method of grouping: First group, all places within 40 miles of the terminal, with a uniform rate of 23 cents per can (40 quarts) of milk, and 41 cents per can of cream. Second group, all places from 40 to 100 miles from the terminal, with a common rate of 26 cents on milk and 44 cents on cream.

group, all places from 100 to 190 miles from the terminal, with a rate of 29 cents on milk and 47 cents on cream. Fourth group, all places beyond 190 miles from the terminal, with a rate of 32 cents on milk and 50 cents on cream.

This system of group rates, it will be noticed, is quite different from that upheld in the Howell case, where the distances covered by the blanket rate were practically the same as those included in the first three groups of the above classification. The Commissioners maintained that they were guided by the same principles as controlled their decision in the earlier case, and that the situation differed in this respect, "that the addition of new territory has operated to the prejudice of the old." The real difference between the two cases was that in the Howell case the evidence seemed to show that it was necessary for the carriers to collect milk from places as far distant as 183 miles from the terminal in order to secure a supply sufficient to satisfy at moderate prices the demand of consumers in New York City. As long as the milk traffic was confined to this territory all producers within the territory could market their product at prices which yielded a fair profit. When the carriers later extended the milk service and the uniform rate to all places within 335 miles from New York, the effect was to widen the source of supply to such an extent as to make it impossible for all producers within the enlarged territory to dispose of their product. Some of the near-by producers were therefore crowded out of the market by those at a distance. The Commissioners declared it to be the

duty of carriers to establish rates which will not deprive producers more favorably situated with reference to a dependence upon

that market of part of their trade in a limited traffic, or prevent their supplying their share of the greater demand due to the increase in the city's population or in the consumption per capita. Furnishing an extra perishable article like milk in no greater quantities than is required for daily use in a given city is a business which falls naturally to those producers nearest the city who are able to provide the needed supply.

That the Commissioners were of the opinion that a system of rate making which had respect for the rights of the near-by producers would be in accord with the cost of service principle emphasized in the Howell case is shown by their statement that, "Prudence would influence railroad managers to confine the collection of milk within the territory in which it can be most cheaply handled and to extend the milk system no further than the increase and growth of the demand should require."

We have already given some consideration to the case of the Commercial Club of Omaha v. Chicago and Northwestern Railway Company et al.2 and have seen that a majority of the Commission refused to sanction the demand of the complainants that since Omaha. Nebraska, and Council Bluffs, Iowa, had a group rate to points in Nebraska, they should also have a group rate to points in Iowa. A difference in the cost of service from the two places was given, it will be remembered, as one reason for refusing the demand of the complainants. Another argument which found a large place in the reasoning of two of the three Commissioners who constituted the majority was that jobbers of Council Bluffs were entitled to their natural advantages of location for carrying on the Iowa trade. Their argument was as follows: —

As respects the distributing trade in Iowa it cannot well be denied that Council Bluffs has some natural advantages of location. . . .

If Council Bluffs is more favorably situated with reference to the trade of western Iowa, the carriers are not to be condemned for recognizing that fact in adjusting their charges. It does not necessarily follow that rates should be the same from Omaha and Council Bluffs into Iowa because they are the same from those places into Nebraska. If Council Bluffs has an undue advantage in the matter of west-bound rates, the correction of any resulting injustice to Omaha must be sought in an appropriate proceeding.

This reasoning would meet with more ready acceptance by the student of railway rates had not previous decisions of the Commission already recognized the validity of group rates under circumstances and conditions which leave little room for doubt that its members would have held them applicable, as a general rule, to Omaha and Council Bluffs, had that question been directly before them. Indeed, the argument of the majority in this case shows that they recognized the validity, or perhaps the necessity, of group rates for Omaha and Council Bluffs to and from all parts of the country except to points in Iowa. To permit the continuance of a group rate from these cities to all places except Iowa points, and then to fall back upon "natural advantages of location" as a reason for refusing group rates to points in Iowa seems illogical and it brings up the question as to whether group rates are ever justifiable, — that is, whether they can be given without taking away from certain places their natural advantages of location.

The two dissenting Commissioners in the case did not object to the argument that Council Bluffs was entitled to its natural advantages of location. Their refusal to agree with the majority was due wholly to the fact that they held that the agreement entered into between the roads, "to establish and maintain absolute equality in in and out rates for these towns" did create a claim for the maintenance of this

agreement in respect to Iowa points if it were maintained for other points.

4. Natural advantages due to competition

Competition might be thought to create artificial advantages rather than natural ones and doubtless this is true in many instances. There are certain conditions, however, in which a place has an advantage over its competitors owing to the fact that it is so situated by nature as to enjoy the advantages of competing routes. Chicago, situated at the lower end of Lake Michigan, where the railway lines running from the east to the northwest must round the lake, is a notable example of a place naturally located to enjoy competition. In most of the cases involving competition the Commission has rested its decision squarely on the basis of this competition, without endeavoring to show that this was a natural advantage possessed by the competitive point. Accordingly most of these cases considered will be dealt with in a subsequent section of this paper. There are, however, a few cases in which the Commission has seen in a competitive situation a natural advantage which entitled the one town to lower rates than those granted to its rivals.

Two cases ¹ in which the city of Sioux Falls, South Dakota, was the real complainant will suffice to illustrate this point, since in the one case the Commissioners found that competition created a natural advantage for one city and in the second case no such natural advantage appeared.

In the first case complaint was made that rates from Chicago to Sioux Falls were unjust and un-

¹ E. J. Daniels v. C. R. I. & P. R'y Co. et al.; E. J. Daniels v. Great Northern R'y Co., 6 I. C. C. Rep. 458.

reasonable as compared with the rates from Chicago to Sioux City, Iowa. The short line route from Chicago was slightly less to Sioux City than to Sioux Falls but both places were well served with railroads connecting them not only with Chicago but also with Duluth, Milwaukee, and other points on the Great Lakes. The Commissioners did not think that under the circumstances the slight difference in distance was a sufficient cause for a difference in the rates to the two cities. They said:—

Confining the issue to location alone and taking into account only the relation of the carriers to these two towns, we should have little hesitation in prescribing for Sioux Falls substantially the same rates from Chicago as are granted to Sioux City. But . . . other considerations incline us to a somewhat different conclusion.

These other considerations grew out of the fact that Sioux City is situated on the Missouri river while Sioux Falls is not. It had been for a long time the practice of the western railroads to make rates from the east somewhat more favorable to cities situated on the Missouri river than to other near-by points. This practice had its origin in the fact that at one time water competition by Missouri river boats had been a potent element in the determination of railway rates; and, altho this competition by water had almost ceased, the business interests of the Missouri river towns had appeared to be more or less dependent on the maintenance of the old rates and they had accordingly been continued.

The Commission, altho expressing its displeasure with the basing-point system of rate making which gave such a preference to the Missouri river towns, saw no way of correcting the evil without disturbing the entire rate situation in the west and creating commercial disturbances in the Missouri river cities

as well. The only practicable remedy was, therefore, to reduce rates to Sioux Falls. Yet, while they ordered some reduction in the rates to that place, the Commissioners were unwilling to add another to the list of Missouri river towns. The reason for allowing a difference in the rates to the two towns could hardly have been actual competition in the one case which did not exist in the case of the other, for as we have seen the two places seem to be equally favored in this respect; nor could it have been distance, for the Commission ignored the slight difference in the distances. Sioux City's advantage lay rather in the fact that it was a Missouri river town and thus shared in the favors granted by the carriers to those towns.

The peculiar advantage possessed by Sioux City in the above case will perhaps be better understood after a consideration of the second case brought by the Sioux Falls complainant. In this case complaint was made that rates from Duluth were higher to Sioux Falls than to Sioux City, which was 78 miles farther from Duluth. The Commissioners found in this case no reason for a difference in the rates to the two places. "The location of Sioux Falls, its distance from Duluth, and the conditions under which transportation is effected, seem to require as low rates to Sioux Falls as those accorded to Sioux City." In some respects this decision might be regarded inconsistent with the decision in the Chicago-Sioux Falls case; since the later decision would seem to require that rates from Chicago to Sioux Falls be reduced in order to meet the reduction in the Duluth-Sioux Falls route. It did not appear from the Commission's investigations, however, that the Duluth route was an active competitor with the Chicago route for Sioux Falls traffic.

Attention must once more be called to the fact that the natural advantages recognized in this series of cases are always due to differences in cost of production or transportation. The natural advantage possessed by a place may be due to lower costs of production as in the Eau Claire case, or to lower costs of transportation as in the Boston Chamber of Commerce case, or to a combination of these two as in the Michigan salt case. The natural advantage may be due to a shorter distance covered in transportation, in which case lower costs are reflected. Group rates which would tend to annul differences in distance or costs of transportation are justifiable only when these differences are slight and when the group rates do not deprive any of the more favorably located producers of a market for their products: for they have the first claim on that market. Natural advantages which are ascribed to competition are the hardest to explain on the grounds of differences in cost; but in the one case cited it may be said that the preference given to Sioux City was originally due to the fact that she had the advantage of a cheap water route to market, and that even after this water route had been abandoned it continued to furnish potential competition which had been given recognition in the system of rate making.

VI. COMPETITION

The act to regulate commerce was passed by a Congress which was strongly of the belief that competition between railroads was salutary in its workings and was to be fostered. The purpose of regulation was not to thwart competition but to check monopoly. The framers of the act and those who voted for it

may not have rightly understood the nature of railway competition and its effect in producing discriminations, but there can be no doubt that they intended that the act should promote competition between carriers and between places, and that they placed reliance on competition as a rate-making force beneficent in its results.

The members of the Interstate Commerce Commission appointed to carry out the provisions of the act were fully aware of the intention of Congress in this matter, and in good faith undertook to apply the competitive principle to railway rates. This is not the place to enter into a discussion of the ways in which the Interstate Commerce Commission gradually modified its views as to the beneficial effects of competition between railroads and came to the conclusion that competition between carriers could be made an excuse for discrimination between places only in those cases where the lower rates were forced by the competition of carriers not subject to the act to regulate commerce. Nor do we need to explain at length the way in which this tendency of the Commission was thwarted by the decisions of the Federal courts 2 to the effect that competition between the carriers subject to the act might create such dissimilar circumstances and conditions as to warrant their being taken into account by the Commission "as having due regard to the interests of the public and of the carriers."

It is important to note, however, that the difference of opinion between the Commission and the courts concerning the extent to which, under the act, competition might be allowed to influence rates, makes

¹ See the First Annual Report of the Commission, p. 40.

Social Circle Case; 162 U.S. 184. Troy case; 168 U.S. 144.

it uncertain how far the real opinion of the Commissioners is reflected in some of the cases to be considered under the heading of competition. Since the purpose of the present inquiry is to show how a consideration of the economic and social conditions affecting rate making has led the Interstate Commerce Commission to develop certain fundamental principles controlling railway rates, we are less interested in those cases in which the decisions of the Commission have resulted simply from obedience to the orders of the courts. But in many of the cases which have come before it the Commission has of its own volition decided that competition was the controlling factor in the determination of the rates in question. These cases may be classified as follows: (1) Those in which the controlling competition is between carriers subject to and those not subject to the act to regulate commerce. (2) Those cases in which the competition is between carriers subject to the act. (3) Where the competition is between places or between different sections of the country. (4) Export rate cases. (5) Where competition between shippers or between producers is the controlling factor. (6) Where competition is necessary to prevent the growth of monopoly.

1. Competition between carriers subject to and those not subject to the act

The act to regulate commerce did not include within its scope carriers engaged in the transportation of passengers and goods entirely by water. And for obvious reasons it could not include those carriers, whether by rail or by water, which were wholly subject to a different political jurisdiction but which nevertheless might at times actively compete with American

railroads for certain kinds of traffic. It was clear that unless the carriers made subject to the act were to be deprived of their fair share of this highly competitive traffic they must be allowed to meet the low rates set by carriers not subject to the act; even if this involved the granting of lower rates on the competitive traffic than were accorded to traffic not competitive. Brief mention will suffice of the cases in which the Commission has upheld rate discriminations which were clearly shown to have resulted from the competition of carriers not subject to the act. The only cases in which the Commission has refused to recognize such competition as a legitimate force controlling rates is where the carrier subject to the act was shown to be the active and not the passive factor, that is, where it was shown to have forced the low rates on its competitors, instead of having had the low rates forced upon it. The Commissioners have also insisted that where a carrier has accepted a low rate on a portion of its traffic because this low rate was forced upon it by competition, the low competitive rate must be high enough to cover the additional costs of handling this traffic. Otherwise it would be necessary to increase the rates on the non-competitive traffic to make up for the loss occasioned by the addition of the competitive traffic.

In the case of Lehmann, Higginson & Co. v. The Southern Pacific Company et al. 1, the Commission decided that a rate of 85 cents per 100 pounds on sugar carried from San Francisco to Humboldt, Kansas, was not unlawful, altho only 65 cents were charged for like shipments to Kansas City, Kansas, which was 100 miles farther from San Francisco than was

Humboldt. "Actual water competition of controlling force" was shown to have determined the low rate to Kansas City and at the same time it was shown that this low rate afforded to the carrier some revenue above the cost of moving the traffic. The rate to Humboldt on the other hand was shown to be not unreasonable and to be even lower than it would have been except for the influence of the competitive conditions at Kansas City.

For the same reasons the Commissioners upheld ¹ the practice of the railroads in granting lower rates to the Standard Oil Company on petroleum shipments to certain points in California from the oil fields in Pennsylvania and Ohio than were granted to the Standard's competitors located at intermediate points on the railroads. Competition of part-rail and partwater lines and of part-pipe and part-water lines existed in case of the Standard's product which did not exist in case of its competitors.

Water competition of "controlling force" was held to justify 2 carriers in charging less on traffic sent from New York City to Memphis, Tennessee, than to Chattanooga in the same state. Lower rates to Nashville than to Chattanooga were not upheld because the Commission did not believe that water competition at Nashville was sufficient to compel the low rates to that point. The United States Supreme Court refused 3 to enforce the order of the Commission with reference to the Nashville rate and on a rehearing 4 of the case the Commission

¹ George Rice v. A. T. & S. F. R. R. Co. et al., 4 I. C. C. Rep. 228.

 $^{^2}$ Board of Trade of Chattanooga v. East Tenn., Va. & Ga. R'y Co. et al., 5 I. C. C· Rep. 546.

^{8 181} U.S. 29.

 $^{^4}$ Chamber of Commerce of Chattanooga v. Southern R'y Co. et al., 10 I. C. C. Rep. 111.

decided that "the traffic from New York and other eastern points is carried to Nashville and Chattanooga under substantially different circumstances and conditions"; hence the higher rate to Chattanooga was not unlawful.

In the case of W. S. King & Co. v. The New York, New Haven, and Hartford Railroad Company et al. 1, complaint was made that a through rate of nine cents per 100 pounds was given on flour sent from New York to Boston, but to Readville, Massachusetts, eight miles nearer to New York the rate was 18 cents, the sum of the combined local rates to that point. The Commissioners upheld the discrimination against Readville on the following grounds: (1) The low rate to Boston was forced by water competition and was under the circumstances allowable. (2) There was no evidence that the local rates to Readville were in themselves unreasonable. (3) The traffic secured by doing the Boston business at the low rates and which could otherwise not be secured enabled the carriers to "make the local rates considerably lower than they would otherwise be."

With reference to this latter point it may be said that it is difficult to see how the local rates could be made less by means of the revenue derived from the through business, if, as the carriers claimed, the rates to Boston were "but little in excess of the actual cost of doing the work."

The Canadian Pacific Railway, not being subject to the act to regulate commerce, has always been a disturbing factor in the rate situation, particularly in the transcontinental freight and passenger business. The Interstate Commerce Commission when brought face to face with the situation created by the competition of this foreign route has declared: 1—

The competing American lines must either meet the reduced rates of such foreign carrier or lose their share of the traffic, and they cannot make such reduced rates apply at intermediate points without suffering large loss of necessary revenue.

The Commission has under such circumstances generally relieved the American carriers from the operation of the long and short haul clause of the act in order to enable them to meet the competition for through traffic.

These are only a few of the cases in which competition by carriers not subject to the act to regulate commerce has been held by the Commission to justify carriers subject to the act in lowering their rates at competitive points. Viewed purely as an economic and social proposition, it is at least debatable whether one carrier should be allowed to take traffic from another which can carry it at less expense, but in view of the fact that not all carriers were made subject to government rate regulation, and since it was clearly the intention of the framers of the act to promote competition wherever competition was possible, it is evident that the Commission has pursued the only way open to it in permitting these competitive rates.

2. Competition between carriers subject to the act

That competition between carriers subject to the act to regulate commerce could create such dissimilar circumstances and conditions that carriers might feel themselves justified in making it an excuse for departing from the rule laid down by the long and

 $^{^1}$ In the matter of the application of the A. T. & S. F. R'y et al. for a suspension of the fourth section. $\,$ 7 I. C. C. Rep. 593.

short haul section of the act, was quite foreign to the minds of the Commissioners during the early years of their service. As explained in the Commission's Seventh Annual Report, the Commission had held, prior to the decisions of the Federal courts placing a different interpretation upon the language of the fourth section of the act, that "the only railroad competition which may justify carriers in fixing rates contrary to the long and short haul principle was in 'rare and peculiar cases'."

The decision of the United States Supreme Court in the Troy case (168 U.S. 144) compelled the Commission to admit that competition between carriers subject to the act was a factor which must be taken into consideration in determining the reasonableness of a given rate. Many of the later cases coming before the Commission are decided, therefore, on the principle that the rates in question are made necessary by the competition of other roads. As already stated, these cases are of less value to us in our search for economic principles than those in which the decision was not forced upon the Commission, and for that reason we shall give them scant attention. We must not, however, fail to note those "rare and peculiar cases" in which the Commission, on its own initiative, has decided that competition between carriers subject to the act is a controlling factor in the determination of a rate.

In the first case ² of this sort to be considered, application was made by a carrier to be relieved from the operation of the long and short haul clause during the progress of the Columbian Exposition in Chicago in 1893. This carrier had in connection with other

¹ P. 33.

² Petition of C. H. & D. R. R. Co., 6 I. C. C. Rep. 323.

carriers established a through passenger service to Chicago from Lima, Dayton, and other points in Ohio. The distance from these places to Chicago by the combination route was much greater than the distance by direct and competing lines. The petitioner therefore desired to be allowed to meet the rates of its competitors to Chicago without reducing the rates from intermediate and non-competitive points. The Commission granted the petition, and in so doing said:—

In the case under consideration it is shown that additional transportation facilities and accommodations for passengers travelling from Lima through Dayton to Chicago and return, during the World's Fair Exposition, are necessary to the convenience and safety of travellers to and from the Exposition. The petitioner has made provision for such increased facilities by establishing a new route which can only be utilized by the acceptance of the lower rate from Lima, \$9, which has been established by a competing carrier having a more direct route. . . . It also appears that this lower rate will yield to the petitioner something more than the cost of the service.

Other cases of the same sort have frequently arisen where a carrier having a long and circuitous route has desired to enter into competition with a carrier having a more direct route but has felt unable to make the rates at intermediate points as low as at the competitive points. When application has been made to the Commission for relief from the fourth section, the petition has usually been granted, provided the petitioners were able to show: (1) that the circuitous route had not forced the low rate but that it was forced upon it; (2) that the low rate at competitive points would yield to the carrier some net revenue, that is, something more than the costs of handling the traffic; (3) that the rates at the in-

¹ See for illustration petitions of C. & E. I. R. R. Co., and of D. L. & W. R'y Co., Commission's Eleventh Annual Report, pp. 102-103.

termediate points were not unreasonable, and that they would not be raised; (4) that business interests along the line would be promoted by allowing such

competition.

Since November, 1897, when the Supreme Court in the Troy case decided that competition between carriers subject to the act might create such dissimilar circumstances and conditions as to warrant a greater charge for a short than for a long haul, there have been many cases in which the Commission has given competition between railroads as a reason for upholding certain rates brought in question before it. In some of these cases it is evident that the Commission is merely following the precedents established by the courts. In other cases it is not so clear that the Commission is not expressing the opinions of its own members in regard to the influence which competition between railroads may properly exercise on rates. The Commissioners at times have adopted a line of reasoning which seems to show that even without the guidance of the courts they would have given much weight to railway competition as an influence tending to establish fair and reasonable rates. One or two references to some of the later decisions will make this point clear.

In the case of the Mayor and City Council of Wichita v. The Atchison, Topeka & Santa Fe Railway Co. et al.¹, complaint was made that the city of Wichita, Kansas, was being unjustly discriminated against because on grain intended for export the rates to Galveston, Texas, from Wichita were higher than from Kansas City, Missouri, which was a more distant point. It was also claimed that the Wichita rate was in itself unreasonable.

The Commission discovered that conditions at Kansas City made the rates from that point highly competitive, since grain intended for export was sent by several routes, to Atlantic as well as to Gulf ports, and these rates had long been the resultant of this active competition. They were, therefore, beyond the control of the defendant carriers. Under the circumstances the rates from Kansas City to Galveston were all that the tarriff would bear, while the Wichita rates were not subject to such highly competitive conditions. The Commissioners believed, however, that the discrimination against Wichita was too great and that rates from there to Galveston were excessive to the extent of two cents per 100 pounds. In rendering their decision to this effect the Commissioners paid some attention to cost of service and to other considerations, but in the main their opinion was based on the fact that competition had tended in the long run to establish a rate of $28\frac{1}{2}$ cents per 100 pounds from Wichita to Galveston and this rate must therefore be regarded as a reasonable one. argument was as follows: -

One test of a reasonable rate is to inquire what has been the result of competition between different carriers; when several different lines of railway could, and did bid for the same traffic, at what price have these carriers transported that traffic? Where such competitive conditions, operating through several years, have settled down into a certain rate, we think that fact is of great weight. Now in the case before us competition, after being subjected to all the restrictions then possible, resulted in an actual rate from Wichita not exceeding $28\frac{1}{2}$ cents on the average. While not conclusive, this is certainly important in attempting to determine what is a reasonable charge.

This statement, which seems to place implicit confidence in competition as a force tending to establish reasonable rates, is not the only one which might

be cited in support of this point of view. Generally speaking, whenever the Commission has upheld "a long existing rate" (and such cases are frequent), the decision has apparently rested on this view concerning the permanent results of competition.

Another application of the doctrine that differences in rates may sometimes be justified by differences in competitive conditions is found in the case of Weil Brothers & Company v. Pennsylvania Railroad Company et al.1 The question raised was whether it was lawful and just to charge 62 cents per 100 pounds for transporting "wool in the grease" from Philadelphia to Fort Wayne, Indiana, when at the same time a rate of 43 cents per 100 pounds was given on the same commodity transported in the other direction. The Commission upheld the difference in rates on the following grounds: -

A great and increasing volume of freight is a factor of much influence towards the depression of rates. The great volume of freight from the west produces a competition to secure the traffic which, with the facilities provided for its handling, serves to secure . . . a rate to the seaboard which may not be taken as a fair measure of rates on the same commodities in chance shipments in the opposite direction.

Altho it does not fall within the class now under discussion it is interesting to note here that another case 2 was decided by the Commission within three weeks of the time when the case just quoted was settled, in which the decision rested on precisely the opposite grounds. The question involved the right of carriers to charge higher rates on screen doors shipped from Fenton, Michigan (near Detroit), to Winsooki, Vermont, than were charged from Winsooki

^{1 11} I. C. C. Rep. 627.

² The A. J. Phillips Company v. G. T. W. R'y Co. et al., 11 I. C. C. Rep. 659.

to Detroit. The Commission gave the following reason for allowing the discrimination to continue:—

To a considerable extent the bulky products of the west require for their transportation equipment in excess of that necessary to the carriage of west-bound freight, so that there is a greater movement of empty cars under lighter power westward, which increases the expense of transportation to the carriers. . . . Some disparity, therefore, between the rates on east-bound and west-bound traffic seems to be justified by the conditions resulting from the empty car movement in one direction.

Here it is evident that cost of service is the controlling principle. The Commission seems unaware of the inconsistency between these two decisions.

3. Competition between places or sections

Competition between places or sections is frequently more intense than that between carriers and is, indeed, not seldom the cause of the latter. The desire to preserve competition between places has, however, at times been used by the Commission as an argument for restricting within certain limits the competition between carriers. Most of the cases in which this attitude has been taken have arisen since the decision of the Supreme Court in the Troy case and doubtless the Commission's decisions have been considerably affected by the ruling of the Court.

A case which affords a good illustration of this sort of competition is that of *The Wilmington Tariff Association of Wilmington*, *North Carolina*, *v. the Cincinnati*, *Portsmouth*, *and Virginia Railroad Company et al.*¹ The city of Wilmington had long served as a distributing center to many interior towns of North and South Carolina not only for goods imported by water, but likewise for goods brought from the west. Through a readjustment of freight rates

made by the eastern trunk lines, Wilmington's chief competitors, Norfolk and Richmond, Virginia, were given rates from the west much lower than had hitherto prevailed, - rates which were substantially the same as were given to Baltimore, Maryland. Water competition at all these points was made the excuse for the lower rates. Water competition of the same sort existed at Wilmington, but it obtained no recognition from the railroads and the higher rates by rail to that port remained in force. As a result of this change in rates Wilmington steadily lost ground as a distributing center and was being gradually supplanted in this trade by Norfolk and Richmond. This was especially true in the case of such traffic as originated at St. Louis or Chicago or at points west of those cities. So far as the traffic originating at Ohio river points, like Cincinnati and Louisville. was concerned, the relation of rates to Wilmington and Norfolk seemed to the Commission to be fair and reasonable. For traffic originating at points beyond the Ohio river and billed to Wilmington, the carriers were found to be charging the full local rates to the Ohio river cities plus the through rates from Cincinnati or Louisville to Wilmington. case the traffic was billed to Norfolk or Richmond the western roads accepted as their share of the through rate from Chicago or St. Louis less than the local rates to Ohio river points, so that this made the total through rate less for Norfolk and Richmond than for Wilmington.

The Commissioners believed that the readjustment of rates had unjustly discriminated against Wilmington. In their decision, they said:—

After giving the case most careful study, and keeping in view the rights and just interests of all concerned, we see no escape from the conclusion that the present adjustment of rates which operates largely to deprive Wilmington as a competing point for wholesale distribution of the benefits of such great primary markets as Chicago and St. Louis and limits her to such intermediate points of supply as Cincinnati and Louisville (from which the related rates appear to be fair and reasonable), subjects Wilmington to prejudice and disadvantages which are in substantial degree undue and unreasonable; that the carriers operating the defendant through lines are to that extent responsible and that the regulation provided for in the Statute should be applied to remove and prevent these wrongs.

Competition between carriers was claimed 1 by the Southern Railway as an excuse for granting lower rates to and from Lynchburg, Virginia, than were accorded to Danville in the same state, the two towns being rival distributing centers. The argument of the defendant may be analyzed as follows: (1) Competition of the trunk lines leading to the Atlantic seaboard has resulted in the establishment of a very low rate to Baltimore. (2) The Chesapeake and Ohio Railway, in order to develop an export business for its own line at Norfolk, has given the same rates to Norfolk as were given to Baltimore. (3) Lynchburg, being an intermediate point on the Chesapeake and Ohio and on the Norfolk and Western Railway, has been given the same rates as were given to Norfolk. in order that the long and short haul clause of the act to regulate commerce may be observed. (4) In order to share in the Lynchburg traffic the Southern Railway is obliged to meet the low rates established by the other roads. (5) Danville does not possess the same competitive situation as Lynchburg and therefore the Southern Railway did not reduce rates to Danville at the time it entered into competition with other roads for the Lynchburg traffic. Nor is it bound to do so, since the United States Supreme

¹ City of Danville et al. v. Southern R'y et al., 8 I. C. C. Rep. 409.

Court has held in the Troy case that competition between carriers may create such dissimilar circumstances and conditions as to warrant them in making lower rates to the long distance competitive points than to the short distance non-competitive ones.

To this argument the Commission replied as follows: (1) The low rates to Norfolk are not due wholly to the competition at Baltimore but "the two rates have mutually interacted. The Norfolk rate may have operated to reduce the Baltimore rate quite as frequently as the reverse." (2) The Chesapeake and Ohio Railway is not alone responsible for the low rates to Lynchburg and Norfolk and these low rates have not been forced on the Southern Railway. On the contrary, the low rates to these cities are the result of active competition in which the Southern Railway has shared. "It cannot be found as a fact that the Southern Railway has simply accepted the rates named by its competitors." (3) Competition by rail formerly existed at Danville and has been ended only by a consolidation of the competing lines under the Southern Railway.

In announcing its decision to the effect that rates to Danville were too high, the Commissioners declared that the Southern Railway in establishing rates much higher to Danville than to Lynchburg had consulted only its own interests, not those of the public. In offering as an excuse for this discrimination the existence of railway competition it did not consider at all the nature of the competition between the cities of Lynchburg and Danville, but it had on the contrary by means of a consolidation of competing lines destroyed "the competitive advantages which the enterprise of [Danville's] citizens in one way or another had secured." The Commission continued:—

Danville is situated 66 miles south of Lynchburg. It is in competition with Lynchburg. Now these carriers have no right to put in effect a system of rates which prohibits the city of Danville from transacting business in competition with the city of Lynchburg. . . . Rates to Danville must be adjusted with relation to competitive localities like Lynchburg.

The Commission therefore recommended a reduction of rates to Danville. It did not, however, recommend that the rates be made as low as those to Lynchburg. While fully convinced that the location of Danville and the competition of carriers which had formerly existed at that point required that rates to that city be reduced, the Commissioners were sufficiently impressed with the showing made by the railroads as to the more active competition at Lynchburg to cause them to hestitate to recommend that equal rates be given to the two cities.

Pursuing a similar line of argument to that employed in the Wilmington and Danville cases, the Commission, in what is known as the St. Cloud case,1 refused to admit the right of a carrier having a long and circuitous route from Duluth to St. Paul, Minnesota, to enter into competition for traffic between these two points unless the carrier was prepared to make the rates as low to intermediate points. The defendant claimed that it was merely meeting the existing rates at St. Paul established by its competitors, but the Commission replied that the moment it entered into competition for traffic between Duluth and St. Paul "it became a factor in the determination of that rate." The long route would not be satisfied with the small amount of traffic which would go to it if it merely met rates established by shorter lines but would seek to attract additional traffic by lowering

¹ George Tileston Milling Co. v. Nor. Pacific R'y Co., 8 I. C. C. Rep. 346.

its rates and would thus discriminate still further against the intermediate points.

The defendant also declared that the existing rate at St. Cloud, the intermediate point, was "reasonable in and of itself," but the Commission replied:—

A rate can seldom be considered in and of itself. It must be taken almost invariably in relation to and in connection with other rates. The freight rates of this country both upon different commodities and between different localities are largely interdependent, and it is the fact that they do not bear a proper relation to one another, rather than the fact that they are absolutely either too low or too high, which most often gives occasion for complaint and which is the ground for complaint here.

If we look at this case not from the legal standpoint but from that of the broader economic and social interests involved, the most obvious objection which can be made to permitting the long and circuitous route to share in the flour traffic between St. Paul and Duluth is that this would be an unnatural and needlessly expensive method of transportation. Altho the Commission did not make this the basis of its decision it did refer to the matter in these words: "Wasteful competition by circuitous routes is to the disadvantage of railways as a whole, for ultimately there must be some relation between rates and the actual cost of transportation."

In the case of F. J. Hoerr v. Chicago, Milwaukee, and St. Paul Railway Company, the Commission held that competition between markets and between producers may compel low rates at competitive points in which near-by non-competitive points may share, altho they are not entitled to rates as low as those given to the competitive points. In this case, the complainant, located at Mankato, Minnesota, claimed that on potatoes shipped to eastern cities he was

entitled to rates as low as were given to shippers at St. Paul, 100 miles further distant, where a through rate was in force. The defendant carrier, on the other hand, insisted that the St. Paul rate was due to competitive conditions which did not exist at Mankato and that the absence of this competition at Mankato "absolves it from its obligations to maintain the relation in rates between St. Paul and Mankato which ordinarily obtains." The Commission did not accept either argument in full. It declared that

if Minnesota-grown potatoes are to compete with others upon the Atlantic coast, a distance of about 1300 miles . . . and compete at the end of the haul with a similar commodity produced much nearer the point of consumption, [they] must of necessity be given a rate of transportation which is lower than the ordinary class rate established for much shorter distances. . . . If potatoes marketed at St. Paul cannot compete in the east without a low rate, the same thing is true of potatoes when marketed at Mankato.

In order to do "substantial justice" to the complainant, however, the Commission decided that it was not necessary to make the rate from Mankato as low as that from St. Paul since

there were competitive conditions at St. Paul which did not obtain at Mankato. . . . These rates are the outgrowth of a variety of competitive conditions, of market competition, of competition upon the Atlantic seaboard, and of competition at St. Paul. Some of these competitive forces act equally in case of both St. Paul and Mankato. Some apply mostly to St. Paul. In some the defendant is an important factor, and in some it is not concerned.

The Commission accordingly decided that a rate at Mankato 4 cents per 100 pounds higher than at St. Paul would work substantial justice to all parties concerned.

The competition which has thus far been considered and which has been held by the Commission to be of "controlling force" in determining rates has been either that between carriers or that between places.

In some instances the competition between carriers has been opposed to that between places and the Commission has been obliged to decide which form of competition should be allowed to continue. A form of competition far more intense and more difficult to regulate is that which results when an alliance is formed between a place or a section of the country and the carriers serving that place or section, and these allied forces then enter into a contest for traffic with other cities and other carriers which also have united forces. The best illustration of this intensified competition is that which has for years existed between the Atlantic port cities and the carriers leading thereto for the export traffic of the country. The development of the export rate controversy before the Commission and the latter's efforts to find a solution for it will be discussed in the concluding article of the series.

CHAPTER III

SUMMARY

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VI. COMPETITION (continued)

4. Export rates

Two questions are raised in connection with this interesting group of cases: (1) Do carriers serving different seaports have a right so to adjust their rates as to promote the export trade of the ports served by them? (2) If this is done, is the carrier thereby placed under obligation to grant the same rates on goods carried to these ports for domestic consumption as it gives to the export traffic?

In attempting to answer these difficult questions the Interstate Commerce Commission has had to consider a vast amount of evidence and listen to many able arguments presenting various views as to the principles involved. Its own conclusions show the influence exerted on the minds of the Commissioners by these opposing arguments and conflicting testimony, and make it difficult for the analyst to discover the leading principle involved in the final decision. Yet, throughout all the reasoning

of the Commissioners, there is evident a desire on their part to preserve competition between the various ports and between the carriers leading to these ports, and also to make it possible for American producers to meet the competition of foreigners in the over-sea market. We may, therefore, without much hesitation, treat these cases under the heading of competition.

The questions just presented first came before the Commission shortly after its organization in the shape of a request 1 for its decision as to whether or not it was illegal "for railroad companies connecting Boston with western points to make the rates from such points to Boston upon grain and provisions for export as low as the rates to New York, althouthe rates upon like property for local consumption are higher to Boston than to New York, the distance being somewhat greater." The Commissioners rendered no formal decision in the matter but informally replied that it was not illegal. The desire to preserve competition between the two ports with reference to the export trade of the country was the reason given for this informal opinion.

Not long after this a formal hearing was given to a case brought before the Commission 2 in which that body was asked to grant an order compelling the defendant carriers to make as low rates on goods sent to Boston for domestic consumption as they gave on the same traffic when taken to New York. The contention was that since equal rates were given to the two cities on goods intended for export and it cost no more to haul goods for domestic consump-

¹ In re Export Trade of Boston, 1 I. C. C. Rep. 24.

² Boston Chamber of Commerce v. L. S. & M. S. R'y Co. et al., 1. I. C. C. Rep. 436.

tion than when they were to be exported, the two cities should have the same rates on their domestic traffic. We have already seen ¹ that the Commission denied this plea on the ground that the natural advantages possessed by New York entitled her to lower rates on goods intended for domestic consumption.

The next case to bring these questions before the Commission was that of The New York Produce Exchange v. The New York Central and Hudson River Railroad Company et al.² It appeared from the evidence submitted that the carriers known as the Trunk Lines were in the habit of accepting as their share of the through export rate to European ports ten cents or more per hundred pounds less than the published domestic rates to New York City. The purpose of the discrimination was evidently to favor the export trade of New York. The Commission seems to have preferred not to discuss at this time the question as to whether it was legitimate as a general principle to charge lower rates on traffic intended for export than on that intended for domestic consumption. Its decision in the present case was against the continuance of lower export rates at New York, but the reason cited was that "any method for making rates should be practicable, and not afford a cover for discrimination and injustice." The only practicable method of making export rates, it was said, was to add the established inland rate from the interior to the seaboard to the current ocean rate.

The task of attempting a settlement of the controversy between the seaboard cities as well as between the trunk lines over export rates could not much

¹ Quarterly Journal of Economics, February, 1911, vol. xxv, pp. 294-296.

² 3 I. C. C. Rep. 137.

longer be evaded and in 1898 such a settlement was attempted by the Commission, after a thoro investigation, in the case of *The New York Produce Exchange v. The Baltimore and Ohio Railroad Com-*

pany et al.1

The complainant in the case attacked the differentials on grain, flour, and provisions made by the various lines from the West in favor of Philadelphia, Baltimore, and other cities. As compared to New York rates these differentials favored Philadelphia to the extent of 2 cents per 100 pounds, while Baltimore, Newport News, and Norfolk received a differential of 3 cents per 100 pounds. Boston, on the other hand, paid the same rates on export traffic as were paid to New York. The differentials applied to freight of all classes shipped from Chicago and from territory between Pittsburg and the Mississippi river and between the Ohio river and the Great Lakes. differentials were somewhat less on traffic coming by the Great Lakes and on that carried on commodity tariffs, but in all cases the rates on export traffic were lower to Philadelphia and Baltimore than to New York.

The history of the differentials showed that they had been applied in one form or another since 1869. They had given rise to many contentions between the cities on the Atlantic seaboard and had caused many destructive rate wars between the carriers leading to the several ports. The struggles "were mostly over export traffic and the differentials were insisted upon and were allowed for the purpose of permitting the various carriers to enjoy a portion of that traffic." The contest between the cities was more bitter than that between the roads; and some

of the carriers, weary of the long struggle, requested certain eminent men with legal training and judicial experience to act as an advisory commission to aid in finding a solution to the problem. These gentlemen made an elaborate investigation covering several months and reported in July, 1882.

The conclusion at which they arrived was that distance could not be used as a measure of these differentials; neither could cost of service. Competition which embraced these two, and all other factors, if properly conducted through a series of years was the most reliable guide. Competition, after many years, had resulted in fixing the differentials in force. Those differentials were justified to a certain extent by distance and to a certain extent by cost of service. The purpose of the differential was to equalize the cost of exporting grain and other merchandise through the various ports to which they were applied. A difference in ocean freight rates from those respective ports, corresponding generally to the inland differentials, was found to exist. Upon the whole, therefore, the [advisory] commission declined to recommend that the differentials which had been agreed upon should be disturbed.\footnote{1}

When the case came before the Interstate Commerce Commission the complainant urged: (1) that the differential was not fair in principle, and (2) that even if the conclusion reached by the advisory commission in 1882 were sound, conditions had so changed since that time that the decision of that year could no longer be held applicable. Philadelphia and Baltimore claimed that the differentials in their favor gave only proper recognition to the fact that the distance from Chicago to those ports was less than to New York. New York interests, however, declared that the wheat of Wisconsin, Minnesota, and the Dakotas was in a territory naturally tributary to New York and that the differentials thus robbed that city of its natural geographical advantages.

To offset this claim, however, Baltimore declared that the corn territory was naturally tributary to that city. The Commission found it impossible to determine the origin of the traffic, as it varied from year to year.

The New York interests further claimed that differences in cost of service did not justify the discrimination against New York, and that if the object of the differentials was to equalize the cost of exporting grain through the various ports, "then the cost of grain in Europe should be the same by each port whereas, in point of fact, it had been less through the outports than through New York." The results of this discrimination were shown in the decline of the export trade of New York in flour, grain, and provisions since 1873, especially during the '90s. while during those years exports had remained about the same at Philadelphia and had greatly increased at other ports. The Commission discovered on investigation that New York had certain advantages over the other ports for conducting the export business, such as were due to her large and accessible harbor, the accumulation of wealth and business which brought many ships there, her elevator storage capacity, and the Erie Canal. On the other hand, the port of New York labored under certain disadvantages due to the heavy port charges, especially for lighterage, and perhaps to more rigid grain inspection than at other ports. The Commission concluded that "so far as the full cargo business is concerned, there is no appreciable difference in cost, and no appreciable difference in the ocean rates from the three ports, New York, Baltimore, and Philadelphia." In respect to "berth rates" (for quantities less than a full cargo) New York appeared to have an advantage over other

ports owing to the large number of steamships sailing from that port.

On the whole, however, efforts to reach a solution of the problem based on a comparison of differences in distance or on the relative costs of service did not yield satisfactory results to the Interstate Commerce Commission, any more than it had to the Advisory Commission of 1882, or to Mr. Albert Fink, or to the other traffic experts who had at various times grappled with the problem. The Commissioners agreed with the earlier investigators that the differentials were based not on differences in distance or in the cost of service but on competition, and that if they were to be justified at all it must be on the principle of preserving competition between the ports and between the carriers which served these ports.

The primary purpose of these differentials is not to do justice to a particular port but to enable the various competing lines to obtain a fair proportion of this traffic. In other words, the reason for these differentials is competition between railways. Cost of service and distance are very likely taken into account by the defendants in determining whether under the operations of the differentials a particular line has obtained more than its share of the traffic, but the underlying principle is competition.

Having concluded that competition was the principle upon which the differentials were based, the Commissioners next discussed the question as to whether this principle was itself just. They quoted from decisions of the United States Supreme Court to show that competitive conditions do not necessarily but "may justify the preference of one locality to another, provided the interests of the public are not unduly sacrificed to those of the carrier." This

¹ Tex. & Pacif. R'y Co. v. Interstate Commerce Commission, 162 U. S. 197;
5 I. C. R. 405. Interstate Commerce Commission v. Alabama Midland R'y, 168 U. S. 144.

however is clearly a legal argument; not an economic one. It is more important to observe the grounds on which the Commission attempted to sustain the existing differentials.

Since competition was the basis, the object of the differentials, it was shown, was to make the cost of transporting such articles as grain from Chicago to Liverpool the same through all ports.

Any difference in the expense of ocean carriage should be equalized by a corresponding difference in the cost of inland carriage. . . . Broadly speaking, the differential is supposed to correspond with and make good a difference in the ocean freight rate.

While, however, the differentials at the time of making the investigation (1896) were the same as when first established in 1878, "the gradual lowering of rates, the shrinking of values, the increase of competition, have all operated to make the differentials in favor of Baltimore and Philadelphia mean more today than they did when agreed upon." The Commission however declared (as had the advisory commission of 1882) that while neither considerations of distance nor cost of service could justify entirely the existing differentials, the most satisfactory means of testing them was "the result of their operation." New York was of course quick to point out that this result had been a great decline in her export trade since the differentials went into effect. But the Commissioners, while admitting that there had been a decline, expressed the opinion that this was in keeping with the natural development of the nation and that New York's early preeminence in the export trade had been due largely to artificial conditions which had since been changed by "other strong influences" operating in favor of other ports.

The Commissioners agreed, however, that owing to the fact that the differences in ocean freight rates from the different ports were at that time less than the amount of the differentials, and that the differentials were having more effect than they had in 1877, these two circumstances "would point strongly to the conclusion that they ought to be modified." The Commissioners did not order any modification, however, and their explanation for not doing so is the least satisfactory portion of their reasoning.

The differentials, it was said, applied to all classes of freight and accordingly affected all commodities. But the exports of higher grade than wheat went almost entirely to New York, where they could find quicker service to all parts of the world. Now, said the Commissioners,

if the quantity of these exports, which the differential does not divert to Baltimore or Philadelphia has been increased in late years, it is manifest that this offsets to that extent any increased diversion of grain to the outports. . . . So it is by no means certain that more grain ought not to go through the outports to offset the increased exports of other kinds from New York.

According to this peculiar reasoning the advantages possessed by Baltimore and Philadelphia do not entitle them to as large differentials as they are actually receiving, but this is "offset" by the fact that New York's natural advantages enable her, in spite of the differentials, to secure a larger percentage of the high-grade exports than formerly. This fallacious argument is made still weaker by the Commissioners' plea that

if we have made an error, it is in favor of the weak and against the strong. . . . It is almost impossible for us to feel that a locality which engrosses one-half of all the exports and three-fourths of all the imports upon the seaboard can justly complain of any undue diversion of its commerce.

Since our purpose is to interpret rather than to criticise the Commission's conclusions we will not follow the argument further, but will conclude our presentation of this case with the Commission's own summary, which shows clearly that in rendering their decision the Commissioners were convinced that competition long maintained afforded the best method of judging as to the reasonableness of the rates in question.

The principle upon which these differentials have been established is legitimate. Looking to the basis of the differentials themselves, while there is much to indicate that they should perhaps be somewhat modified, it cannot be affirmed with certainty that they are wrong. Considering their effect as exhibited through a long series of years, it is impossible to say that they have exercised any untoward or unnatural influence upon traffic.

The decisions of the Interstate Commerce Commission in the later cases dealing with export rates which have come before it have been much influenced by the decision of the United States Supreme Court in the *Import rate case* ¹ in which the Court, over-ruling the Commission, held that

among the circumstances and conditions to be considered, as well in the case of the traffic originating in foreign ports as in the case of traffic originating within the limits of the United States, competition that affects rates should be considered, and in deciding whether rates and charges made at a low rate to secure foreign freights which would otherwise go by other competitive routes are or are not undue and unjust, the fair interests of the carrier companies and the welfare of the community which is to receive and consume the commodities are to be considered.

By inference, at least, this decision of the Supreme Court would apply to the export as well as to the import traffic, especially since competition is dis-

¹ Tex. & Pacif. R'y Co. v. Interstate Commerce Commission, 162 U. S. 197; 5 I. C. R. 405.

tinctly set forth as a reason why lower rates might be granted by carriers to commodities intended for export than were granted to the same articles when intended for domestic consumption. With this case as a precedent, therefore, the Commission decided in the case of Boston export traffic 1 that even tho these goods were not shipped on a through rate, they might legitimately be charged lower rates than were accorded to the same goods intended for domestic consumption. "The export rate to Boston," said the Commissioners, "is not in reality a Boston rate at all but is in essence the inland division of a through rate through that port to foreign ports."

The principle underlying this decision is clearly not cost of service but competition. The decision is in accord with the informal opinion rendered in the case of the Export Trade of Boston, but is not in agreement with the rule laid down in New York Produce Exchange v. New York Central and Hudson River Railroad Company et al.3 The language of the Commissioners also indicates that they believed it correct in principle to apply a different ruling in the case of Boston export traffic than they would apply at New York. For, while they admitted that their decision in the present case was influenced more or less by the Supreme Court's decision in the import rate case, they practically assumed full responsibility for their own decision by stating that the decision of the Supreme Court did not carry with it any obligation on the part of the Commission to sanction lower rates on import or export traffic than on domestic traffic, but merely required that "in determining whether such rate constitutes an unjust

¹ Kemble v. B. & A. R. R. Co. et al., 8 I. C. C. Rep. 110.

^{2 1} I. C. C. Rep. 24.

discrimination or an undue preference, the interest of the carrier and the consumer should be taken into account as well as that of the producer." The Commission therefore declared that "if any individual or locality feels itself aggrieved by the rates made upon export or import business as compared with domestic business, the Commission has full authority to consider and pass upon that grievance." So far as Boston export traffic is concerned, therefore, there appears to be no difference in the opinions of the Court and the Commission. Both tribunals agree that competition is the controlling principle in the case.

The real difference in the opinions of these two bodies is best revealed in the Commission's report on an investigation made by it in 1899, In the matter of relative rates on export and domestic traffic in grain.¹ Two questions were involved: (1) To what extent, if at all, might the carriers make a different rate on grain intended for export than that given to the same commodity when intended for domestic use? (2) Might there be a legitimate difference made between the export rate on grain and that on its chief products, flour and meal?

With reference to the first point, the evidence showed that the railroads connecting the Middle West with the Atlantic seaboard were giving a rate of 12 cents per 100 pounds on grain shipped from the Mississippi river to New York when it was intended for export, and at the same time were charging 19½ cents per 100 pounds on the grain when it was intended for domestic consumption. The carriers claimed that "it is a matter of no consequence to the eastern consumer what rate is charged to the foreigner, provided

the domestic rate is a reasonable one." This argument did not appeal to the Commissioners. They replied:—

To this proposition we cannot fully assent. In the first place the foreigner is to an extent in competition with the American. Both are engaged in the production of articles sold in the same market either abroad or in the United States. If the Englishman can procure the necessities of life cheaper than his American competitor, that gives him the advantage. . . . Unless there is some good reason for the distinction, the rate to the American ought not to be higher than to the foreigner. If our carriers, in the absence of any constraining reason, can transport corn from the Mississippi river to New York for 12 cents per hundred pounds for export, that of itself shows that a rate of $19\frac{1}{2}$ cents to the domestic consumer is unreasonable.

The carriers made some effort to show that the cost of service was less for the export than for the domestic traffic owing to bulk of shipments, methods of unloading, etc., but the Commission dismissed this argument with the statement that the evidence on this point was insufficient. The main ground of defence occupied by the carriers was that competitive conditions existed in the case of the export traffic in grain which did not exist in the case of grain intended for domestic consumption. The competitive conditions were of two sorts: (1) competition in the European market between American producers and those of other grain exporting countries; (2) competition between the carriers engaged in transporting export grains.

With reference to the first form of competition the defence claimed that the price of wheat was fixed both at home and abroad by the foreign market and it was said that if the price of wheat abroad were lower than the price in this country plus the established rate for transportation, then either the price of wheat must be reduced or the rate of transportation must be lowered. By pursuing the latter course, the carriers claimed that the American producer received the entire benefit from the reduction of railway rates. This patriotic and philanthropic mode of procedure on the part of the railroads did not greatly appeal to the Commissioners. They did not accept the statement that the foreign market fixed the price of American grain and said, "As an actual fact it is doubtless true that the price of grain, certainly wheat, abroad is fixed neither by the foreign nor by the American supply alone, but by the one acting upon the other." The facts, furthermore, did not show that at the time of the investigation the low rates on export grain had been rendered necessary by the condition of the foreign market, but they did show, according to the Commissioners, that "the American producer has derived no substantial benefit from these rates; that the American carrier has lost enormously by them, and that the foreigner alone has had the benefit of them."

The Commission was willing to attach more importance to the second form of competition cited by the defence, viz. that between the carriers themselves. This competition was three-fold in character: (1) that between the trunk lines and those running to the Gulf ports; (2) that between the trunk lines themselves; and (3) that between the railroads and the water routes, especially the Great Lakes, St. Lawrence river, and the Erie Canal. This competition, the Commissioners were compelled to admit, must be considered in judging as to the reasonableness of the export rates, tho they declared it had "sacrificed millions of dollars" of revenue of American railroads. "Nor would we," said they, "permit the continuance of such a system if we had the power to prevent it."

Owing, however, to the influence of water competition, as well as to the fact that "the purpose of the act was to foster competition," and "the highest judicial authority has declared that competition between railways may be a reason for making a lower charge to the more distant point," the Commission confessed itself powerless to order carriers to make their rates on domestic traffic as low as that given on the export traffic.

The question as to whether or no it was legitimate to charge a higher rate on grain products than on grain, when both were intended for export, was answered by the Commission on much the same principle as was applied to the settlement of the controversy over the domestic and export grain rates. The carriers sought to justify the higher rates on flour than on grain on several grounds: (1) Cost of service. Flour was said to be more liable than wheat to injury; wheat moved in train load lots; wheat was delivered in New York at the ship's side, flour over the ship's side. The Commission admitted some difference in the cost of service but thought it would not exceed one or two cents per hundred pounds. (2) The carriers urged that the general rule that manufactured products should pay a higher rate than raw materials was applicable to this case and that the value of the flour was greater than that of the wheat. The Commission said that "when it is remembered that the cheaper grades of flour are usually exported, it is questionable whether the difference is material." (3) Water competition, a prominent factor in connection with the movement of wheat, was shown to be of less importance in case of the flour traffic. Hence, in spite of strong evidence submitted by the millers, showing that the profits from manufacturing flour for export were only from one to two cents per hundred pounds, the Commissioners said: "We think and find that the lake competition fairly fixes the rate on flour at from two to four cents per hundred pounds above the wheat rate." In spite of the fact that water competition as well as competition between the railroads was a real factor in the case, and that both the law and the courts compelled its recognition, the Commission evinced throughout the entire case a strong feeling that this competition was bad policy not only for the public at large but even for the carriers. This feeling, as well as the desire to go as far as they could go in sustaining American millers in their competition with the milling industry abroad, led the Commissioners to decide that "the rate upon flour for export ought not to exceed that upon wheat by more than 2 cents per hundred pounds."

Three years after the Commission had rendered its decision in the above case, the trunk lines leading to the East from Chicago and the Mississippi river gave notice of an advance to be made in the rate on grain from a former published rate of 17½ cents per 100 pounds (which, however, was seldom maintained) to a rate of 20 cents per 100 pounds. When the Commission undertook an investigation 1 of the causes and justification of the increase, the carriers gave as reasons: (1) changes in commercial conditions, and (2) cessation of competition to a degree which made it easier to maintain published rates. The Commission did not discover that there had been any such change in the commercial conditions for producing, shipping, and marketing grain as would warrant an advance in the rates, but the second

¹ In the Matter of Proposed Advances in Freight Rates, 9 I. C. C. Rep. 384.

reason advanced by the carriers seemed a more plausible explanation for the increase.

The intense competition which had for years existed between the lines leading from the West to the Atlantic seaboard had been, if not ended, at least in a measure brought under control by purchase of large blocks of stock in the most troublesome of these competing lines by the two strongest lines, the Pennsylvania and the New York Central railroads. This purchase and resulting control of the weaker lines by the stronger ones made it seem much more likely that in the future the published rates could be maintained.

The Commission refused to justify the advance in the published rates from $17\frac{1}{2}$ to 20 cents per 100 pounds. They called attention to the fact that the language of the act to regulate commerce and the decisions of the Supreme Court in interpreting that act and the Sherman Anti-Trust Act showed that public opinion reflected in legislation and judicial decisions was unwilling to concede that competition in the railway business was not a proper means of regulating freight and passenger business. The Commission's discussion of the matter shows clearly its own belief that competition between railways was frequently of such a character as not to guarantee reasonable rates.

It has been frequently observed that competition in rates under the act to regulate commerce is a misnomer. This grain rate between Chicago and New York must be the same by all lines. If any one line reduces that rate, every other line must make a corresponding reduction or withdraw from the business. No line can, therefore, hope to gain a permanent advantage by a reduction in the published tariff. So long as rates are observed there can be no competition in the rate, altho there may be in facilities. Such competition necessarily consists in departures from the published rate. Such competition does not, however, materially increase the total amount of traffic. It may turn additional tonnage to a particular line temporarily, but the total result is a reduction in the aggregate gross and net revenues of all lines and probably in the net revenue of every individual line.

To the Commission, therefore, the mere fact that competition in rate making is shown to exist is not a sufficient proof that the resulting rates are reasonable. Competition may make the rates too low. The railroads insisted that this was true in the present instance and claimed that even the former published rate of $17\frac{1}{2}$ cents per 100 pounds was so low that it was unremunerative. To decide this point the Commissioners made an investigation into relative costs of moving grain and other commodities, with the following results:—

Of all commodities grain is among the very most desirable species of traffic. It moves between Chicago and the Atlantic seaboard in large quantities, frequently in train loads. Cars can be loaded to their full capacity. The nature of the business permits prompt loading and unloading. The character of the service required allows the most economical handling of trains with respect to rate of speed and other operating conditions. There is hardly any kind of traffic moving from Chicago to the Atlantic seaboard which can be transported at less cost to the carriers than grain. . . . The first reason urged by the carriers for advancing these rates beyond the competitive point is not therefore sustained. Whether tested by the actual cost of movement, by what carriers have voluntarily accepted in the past, or by comparison with other somewhat similar kinds of traffic, this rate is not, in our opinion, extravagantly low.

While the Commission, therefore, still held to the theory that competition was the controlling factor in the case, the competition which they recognized as legitimate was that limited in its operation by cost of service.

The ever-perplexing problem of the differential rates between the North Atlantic ports came up

once more in the year 1904, when the Commission, at the request of the commercial organizations of Boston, New York, Philadelphia, and Baltimore, instituted an inquiry into the reasonableness of the railway rates to and from these cities with the purpose of determining whether the existing differentials should be abolished, or, if retained, be modified. The Commission admitted that it had no authority to compel the carriers to accept its conclusions, but for our purpose this fact is of no importance, since we are interested only in the Commissioners' views as to the principles involved.

On the whole, the conclusions reached did not differ materially from those arrived at in the earlier investigations. The Commission seems to have felt that the earlier decisions were not based on any fundamental principle of rate making and in the present instance they declared: "We have endeavored to find some fundamental principle by the application of which this dispute might be laid to rest, but entirely without success." The evidence showed that since the last hearing on the subject the differentials which had formerly existed in favor of Baltimore and Philadelphia had been greatly reduced, especially on grain and on iron and steel, where they amounted to only one-half the old differentials. The reason for the change was that there was no longer any considerable difference in the ocean rates from the various ports. Baltimore claimed indeed that "on the basis of distance the present rates did not give that locality anything like the advantage to which it was entitled." To this argument the Commission pertinently replied: -

¹ In the matter of Differential Freight Rates to and from North Atlantic Ports, 11 I. C. C. Rep. 13.

It must be evident that distance is properly regarded as a factor in rate making mainly because it is supposed to express differences in the cost of service. . . . The grades by the New York Central lines between Chicago and New York are easier than those by the Pennsylvania and it is quite conceivable that the actual cost of transportation over the longer haul might be less than over the shorter, and in that event New York, while more distant in geographical miles, might be nearer in transportation facilities.

The Commissioners did not concede, however, that cost of service could be made use of as a principle for finding a solution to the problem. They said:—

Nothing of all that need be considered by us. There is no testimony in this record which attempts to show the relative cost of handling this traffic from Chicago to the different ports, and indeed, as was said by the Advisory Commission in 1882, the elements which enter into the determination of that question are so complex and so various as to render it impossible of satisfactory solution.

Having declared that in this case "there is no fundamental principle which can be applied," the Commission nevertheless insisted that "there are certain fundamental considerations which should be kept in mind." In the opinion of the Commission, these fundamental considerations were: (1) the maintenance of competition between the ports; (2) the maintenance of competition between the carriers.

(1) If it can be properly done, these ports should all be kept open for the transaction of this export business upon such terms that each one may fairly compete for it. No marked advantage should be given, certainly not by the creation of artificial conditions, to any one port over the other. The ideal conditions would be the establishment of such rates that enterprise at either port in the way of improvement in service or facilities might be rewarded by increased business and that there might exist that healthy struggle of locality against locality which is the best security for proper commercial development.

(2) If again it can properly be done, then rates should be so adjusted that this competitive traffic will be fairly distributed between the different lines of railway which serve these ports.

Each one of these four cities is reached by two or more great railway systems. The prosperity of these cities and systems cannot be separated. The ability of a railroad to adequately discharge its duty for a reasonable charge depends upon the business which it can obtain, and no one of these systems should be deprived of its fair portion of this enormous export traffic. The purpose of these differentials from the first has been to distribute this business between the different carriers and we said in our former report that this was not improper unless the means used were improper.

This double competition between cities and between railroads was the fundamental consideration which in former times had led to the granting of a differential rate of three cents in favor of Baltimore and of two cents in favor of Philadelphia. Under changed conditions this same competition had in 1899 caused a reduction of these differentials by one half. For the same reasons which had led it to uphold the former differentials the Commission in the present case declared: "We are satisfied that the differentials of one cent and one and one-half cents, which were then [1899] established and which are still in effect, are sufficiently large." Some slight modifications were recommended in the existing differentials on flour and on grain coming by way of the Great Lakes.

It would appear from this long discussion of the export rate cases that while competition was selected by the Commission as the ruling factor in the determination of rates, its selection was a matter of expediency rather than of principle. The Commissioners seem to have felt that this competition did not itself represent any "fundamental principle." Much in their reasoning indicates that they would gladly have reached a decision on the basis of cost of service if the facts showing such cost had been at hand. Yet it is by no means certain that they

would have preferred to rest their decision on cost of service. The idea that competition creates "the ideal condition" for the distribution of traffic among the ports is carried so far in the last case considered that the majority of the Commissioners said: "It is possible that in the future it may become evident that Boston cannot fairly compete for this traffic upon the present basis," and hint that should this prove to be the case it might become necessary to give Boston a lower rate than that given to New York; this too in spite of the fact that the cost of moving traffic to Boston is admitted to be greater than to New York.

The same emphasis on competition is shown in answer to New York's claim that the maintenance of any differential forces traffic out of its natural channels and imposes a burden on the public. The Commission replied: "To decree that traffic should always move by the cheapest route would be to entirely eliminate competition, which within reasonable bounds is for the interest of the general public."

It would be hard to say how far this un-economic sentiment, which makes of competition an end instead of a means to an end, expresses the real judgment of the Commission; how far it is merely a reflection of the spirit of the act to regulate commerce and of the decisions of the courts.

5. Competition between producers

Besides seeking to maintain competition between the carriers themselves and between places, the Commission has shown no little concern over the maintenance of competition between producers. Generally speaking, its efforts in this direction have been made

in behalf of the small producer or dealer who was in danger of being driven out of business by a more powerful competitor. The Commission has apparently felt that it was charged with the duty of checking the growth of monopoly in the field of production as well as in that of transportation.

In the case of The F. Schumacher Milling Company et al. v. The Chicago, Rock Island, and Pacific Railway Company et al., the complainant asked that the carriers be required to give the same rates on a mixed car load of cereal products as they gave to a car load of only one of these products. The defendants had been in the habit of charging the ordinary less than car load rates on such shipments. Generally speaking, the Commission has been inclined to favor the granting of car load rates on mixed car loads of similar products. In the present instance it declined to order a car load rate on the mixed car load shipments. The advantage of such a rate would fall to a single producer, the complainant, since no other producers of these commodities could ship in car load quantities.

To grant a mixed car load rate would enable the complainant to crush out all competition on the part of those who make only one or two of the products in controversy. It is undoubtedly true that neither the Commission nor carriers are charged with any particular oversight over localities or authorized to stimulate them with artificial helps to prosperity. But when a method of regulation would have the effect of throwing many competitors out of the trade, and centralizing it in the hands of one or more dealers, it would not be permissible if another method, without doing wrong to any one, would have the effect of leaving the market open to all competitors. The rule is simply a limitation put upon the extension of the car load rate, and should be proven by the complainant to be unfair, unjust and discriminative, if its abrogation is sought.

¹ 6 I. C. C. Rep. 61; 4 I. C. R. 373.

² See for example 5 I. C. C. Rep. 633 and 9 I. C. C. Rep. 602.

For the same reasons the Commissioners ordered 1 a reduction in the rates on soap shipped in car load lots. The carriers had recently changed the classification so that soap, having been placed in fourth class when shipped in car load lots, was thereafter to pay "20 per cent less than third-class rates." At the same time shippers who shipped soap as part of a mixed car load from one consignor to one consignee were to be charged only the "highest minimum car load rate provided for any of the articles" so shipped. It was shown that the only soap manufacturers who could avail themselves of this privilege were the big meat packers who by making up a mixed car load of provisions and soap could receive fifth-class rates on the entire car load, while their competitors who manufactured only soap would be obliged to pay the 20 per cent less than third-class rates. The Commissioners held that such discrimination was opposed to the principles of competition between producers and assisted materially in the fostering of monopoly.

Still another illustration of the same principle is found in the case of Brownell et al. v. Columbus and Cincinnati Midland Railroad Company et al.² The complainant demanded that the rates on a car load of eggs be made less than the rates given on less than car load lots. This demand the railroad had refused. The complainants claimed that the cost of gathering eggs by the carrier was much less when they were shipped by the large dealer than when shipped by the small dealer and that if the carrier made no difference in the rates it was guilty of a discrimination against the large dealer. The defendants, on the

¹ The Proctor and Gamble Company v. C. H. & D. R'y Co. et al., 9 I. C. C. Rep. 440.

² 5 I. C. C. Rep. 638; 4 I. C. R. 285.

other hand, claimed that they had for years been developing a system of reaching the small dealer in eggs and that this was to the interest of the public at large as well as to the interest of the carriers, since the effect of granting lower rates on car load lots would be to concentrate the egg business into the hands of the large dealers who could then, by threatening to throw all their business to one road, compel unfair concessions from the carriers.

It was this argument of the defendants which prevailed in the minds of the majority of the Commissioners and led them to refuse the request for a car load rate. They gave some consideration to the cost of service arguments of the complainants but declared that only a few points of difference in the cost of car load and less than car load shipments had been shown to exist. On the other hand, they said:—

The evidence shows that at the present time 83 per cent of the business is controlled by these large shippers, and it would seem that an order granted as prayed for by complainant would go far towards concentrating the whole business in their hands. The tendency of the times, deplored by all, is the concentration of the transportation business of the country in the hands of a few individuals who control large amounts of business. This interferes with competition, and works an injury to many who are almost as well equipped for the business as those who in the end succeed by a concentration of power in the hands of a few to rule out all below them.

Commissioner Knapp, who united with the majority of the Commission in the final decision, declared that carriers were not bound as a matter of right to offer special car load rates. "It is one thing to concede the right to make a car load rate, it is quite another to require it." Commissioner Morrison, on the other hand, dissented from the conclusions of his fellow

commissioners and held that when, as in the present instance, a lower cost of service for car load shipments could be shown to exist, car load rates were required as a matter of principle.

In another instance ¹ where the right of a carrier to give a lower rate on a cargo or train load of wheat than on single car load shipments was brought in question, the defendants were able to show that the costs of handling and shipping the wheat in train loads was less and the time saved was greater than in the case of single car load shipments. The Commission held that such a practice "must tend very strongly to throw business into the hands of the larger dealer exclusively," and was therefore not permissible.

In the case of Glade Coal Company v. Baltimore & Ohio Railroad Company,² it was shown that the defendant carrier was charging 50 cents per ton more on coal loaded from wagons or sleds than when it was loaded from a tipple. The reason given for the discrimination was that loading from tipple could be done at less expense to the carrier and usually in less time than when the cars were loaded from a wagon.

The Commission acknowledged that the costs of loading cars were less when the loading was from a tipple than when it was from wagons, but it did not consider the difference in costs sufficient to warrant the discrimination in rates. Such discrimination was found to result in a reduction in the number of shippers and the Commission said:—

We do not consider it at all clear that the interests of the public, in the true sense of the term, would be subserved by a reduction in the number of shippers and shipping points. On the contrary we think such interests demand that all persons wishing to ship

¹ Paine Bros. & Co. v. L. V. R. R. Co. et al., 7 I. C. C. Rep. 218.

¹⁰ I. C. C. Rep. 226.

goods to market shall be given a reasonable opportunity to do so. Competition is considered a public benefit and the greater the number of shippers the greater the competition among them will be. . . . If carriers are allowed to make differences in the cost of transportation, and see fit to do so regardless of the effect upon shippers and localities, the ultimate result must be that the bulk of the traffic will be handled by comparatively few shippers and from and to large centers. We cannot believe such a result was either intended or desired by the framers of the regulating statute.

In all the cases in this group it will be observed that the Commission has given competition a distinct preference over costs of service as a means of determining the reasonableness of the rates in question.

6. Competition to prevent a transportation monopoly

We have already observed that in numerous instances the Commission has considered that competition between carriers was a sufficient excuse for certain discriminations in rates. It has also appeared that the decisions of the courts have compelled the Commission to enlarge the number of these cases. In view of the importance thus given to competition as a regulator of rates, it goes without saying that the Commission would view with displeasure all efforts on the part of the carriers to take advantage of the disappearance of rivalry to raise their rates above the point at which a normal competition would have tended to fix them. The progress of railway consolidation within the last fifteen years has brought about numerous instances of such rate increases. Some of these increases have been brought to the attention of the Commission by shippers seeking relief.

In the case of the Central Yellow Pine Association v. The Illinois Central Railroad Company et al., an

association of persons engaged in the manufacture of lumber in the southern states east of the Mississippi river complained of a steady advance, covering a period of several years, in the rates on lumber to points on the Ohio river and beyond. The carriers gave two reasons for the advance: (1) The increasing value of the service; the business of manufacturing lumber was yielding increasing profits and the carriers by their rate advances were seeking to share in the general prosperity. (2) Cost of service; higher wages and increased cost of materials made it necessary to increase the rates on lumber, which had not been yielding its fair proportion of the revenues needed.

Postponing for the present the Commissioners' discussion of the carrier's claim to share in the increased prosperity of the shippers, we may say that they did not find that either cost of service or value of service warranted the increase in rates. These advances in rates, it was shown, had been brought about as a result of an agreement reached between the roads east of the Mississippi river and the roads west of that river engaged in the lumber traffic. The majority of the Commission decided (Messrs. Knapp and Fifer dissenting) that this agreement, whether unlawful or not, had resulted in the elimination of competition and "competition is favored by the laws."

The ground upon which competition is favored is that it conduces to the reasonableness of rates or to the protection of the public from unreasonably high or excessive rates. In *United States v. Freight Association* (168 U. S. 339) the Supreme Court says "competition will itself bring charges down to what may be reasonable." The act to regulate commerce (section 1), in prohibiting unreasonableness of rates, in effect forbids whatever conduces to such unreasonableness. In any event it is incumbent upon this Commission, when the reasonableness of rates is in issue before it, to consider how those rates were brought about — whether they are the product of untrammeled competition or the result of a

concert of action or combination between the carriers establishing and maintaining them. The advanced rates complained of cannot be claimed to be the outcome of competition, because "the natural, direct and immediate effect of competition is to lower" (177 U. S. 577) rather than to advance rates.

The case of *H. H. Tift et al. v. Southern Railway* Company et al.¹ presented much the same situation as the above case and the Commissioners reached the same conclusion as to the necessity of maintaining competition.

In another case, 2 altho the Commission did not claim any jurisdiction, it expressed the opinion that railroads subject to the act to regulate commerce had no right to refuse to enter into an agreement with a boat line engaged in the coasting trade when at the same time it had made such an agreement with another line engaged in this business. Enterprise Transportation Company was a steamship company which in June, 1905, began to engage in traffic by boat between Fall River, Massachusetts, and New York City. Prior to its establishment the various boat lines operating on Long Island Sound were consolidated under the name of the New England Navigation Company, which was controlled by the New York, New Haven, and Hartford Railroad Company. In this way the New Haven road had secured a virtual monopoly on transportation between southern New England and New York. The establishment of the Enterprise Company had resulted in lowering considerably the rates of transportation between Fall River and New York; but the railroads running west from New York had refused to enter into any

^{1 10} I. C. C. Rep. 548.

² In the matter of alleged unlawful discriminations against the Enterprise Transportation Company by railroad lines leading from New York City, 11 I. C. C. Rep. 587.

joint rates with this company, altho they had such arrangements with the New England Navigation Company. This compelled the Enterprise Company to depend entirely on local traffic, as the low through rates furnished by the joint-rate agreement between the New England Navigation Company and the railroads made it impossible for others lacking such arrangements to compete with them.

The railroads upheld their refusal to enter into joint-rate agreements with the Enterprise Company on what they called "business principles." Such a joint rate they held would not increase the amount of traffic from Fall River but would merely put them to the trouble of receiving goods from two lines instead of one. The Commissioners admitted that there was force in the arguments of the carriers, but maintained nevertheless that this throttling of competition was detrimental to the public interests. They said:—

It is undoubtedly true that better and more efficient service is obtained when competition exists than when the business is entirely transacted by one concern. . . . When the competition of the Enterprise Company had disappeared, rates would be restored to what they formerly were, which, it fairly appears, were higher than reasonable competition would produce. The existence of the Enterprise Company as a competitive factor is of distinct value to the public, and that existence may depend upon its right to engage in through business.

It would be useless, after this long review of the cases in which the Interstate Commerce Commission has seized on competition as the determining factor, to attempt to show that the Commission has been always consistent in its argument as to the part which competition should play in matters of rate making. At times it has seemed to argue that competition itself represents "no fundamental principle" but is only a "consideration which should be kept in mind";

at other times it has given a distinct preference to competition over cost of service as a principle. At times the Commission has believed that competition has made rates too low; at other times too high. Some of the apparent inconsistencies can doubtless be attributed to the changes in membership of the Commission. Other and more serious inconsistencies are due to a desire to preserve the spirit of the act and to respect the decisions of the courts, even when the Commissioners themselves have personally had different views concerning competition. In spite of these inconsistencies, apparent and real, a careful consideration of the cases which we have reviewed and of others not covered will show that it is not merely competition itself which the Commission has sought to preserve and upon which it has at times relied as a guide to the solution of the problems presented; it is rather that type of competition which represents the normal state of business affairs, the competition which leaves to railway owners a reasonable return for the services rendered and which in turn requires them to render these services at what the economist means when he speaks of cost prices.

VII. CLASS AND SECTIONAL INTERESTS

In the discussion of railway rate theories to be found in the First Annual Report of the Interstate Commerce Commission, to which reference has several times been made in this series of papers, we find mentioned among the "considerations which may justly affect rates" the following:—

Every section of the country has its peculiar products which it desires to market as widely as possible, and is not unwilling that

classification should be made use of by the railroads which serve it as a means of favoring and thus extending the traffic in local productions; favoring them by giving them low classification, and thus low rates, and discriminating against those of other sections through a classification which rated them more highly.

The principle that common carriers engaged in interstate commerce and subject to the regulation of a federal statute may legitimately make rates which openly favor one section of the country and discriminate against other sections is a notion so contrary to the spirit of the act to regulate commerce as well as to the Constitution, that we might well hesitate to believe that the Interstate Commerce Commission had intended to give its approval to the above statement were it not for the fact that in its Second Annual Report, as well as in certain decisions, it restates this doctrine in such a fashion as to leave us no longer in doubt as to its approval of this form of discrimination under certain circumstances. The statement in the Second Annual Report ¹ reads as follows:—

Every railroad serves a certain territory and every part of the country has to some extent interests to be served which are special and peculiar to it, and these it will naturally desire to have specially considered by local, official and corporate authorities, whether the business in hand be the imposition of taxes or the adjustment of rates for transportation; and as many other circumstances besides cost of transportation and value of service must always be taken into account, such as bulk or weight of articles, convenience of handling, special liability to injury and necessity for speedy delivery, and the field of production or of consumption, so that there can never be any fixed or definite rule for the measurement of the charge to be made upon any particular traffic, it is always possible for the railroad manager in making rates to yield something to the special interests of his section, and still keep in view the general principles upon which he will professedly act.

It is not our purpose in these articles to criticise the work of the Interstate Commerce Commission or, except incidentally, the theories which it has promulgated. It will be sufficient, therefore, to say that it is fortunate that there are not many cases heard by the Commission which have been decided strictly on the basis of sectional or class interests, althouthere are several cases in which the strong claims put forth in behalf of certain communities or certain classes of persons have received a degree of recognition.

1. Domestic versus foreign producers

Perhaps the best example of this form of discrimination, at least the one which will excite the least criticism, is where the Commission has undertaken to assist the domestic producer at the expense of the foreigner. A good illustration is afforded by the case of The National Hay Association v. The Lake Shore and Michigan Southern Railway Company et al. Prior to the passage of the Dingley Tariff Act in 1897 hay from Canada had competed actively with hay from the Middle West in the eastern markets of the United States. At this time the rates on Canadian hav under the Official Classification adopted by the eastern trunk lines were commodity rates lower than fifthclass rates while hay from the Middle West paid sixth-class rates. In order to protect the domestic producer of hav the Dingley Tariff Act increased the tariff on hav coming from foreign countries from two dollars to four dollars a ton. This increase in the tariff rate checked the importation of hay from Canada, tho it did not actually prevent it.

On January 1, 1900, the roads operating under the Official Classification changed the classification of American hay from sixth class to fifth class with a

corresponding increase of rates, but left the commodity rates on Canadian hay as they had been. Under this readjustment of rates the importation of Canadian hay rapidly increased and the competition was proving a hindrance to the American producer. The roads gave as reasons for the change in rates cost of service and need of more revenue, neither of which arguments the Commission was inclined to recognize. On the other hand, the Commissioners called attention to the fact that the advance in rates had in reality thwarted the purpose of Congress in increasing the tariff on Canadian hay. They said:—

That advance interfered with a long standing relation of charges from the two producing sections which operated to give an advantage to Canadian hay compared with the pre-existing situation, and such change in a long existing rate adjustment was in favor of a producing section in an adjacent foreign country from which hay shipments into the United States are required by law to pay a duty as great as \$4 per ton.

The effect of the Commission's decision was, of course, to favor the producer of hay in the Middle West against not only the Canadian producer but also the eastern consumer. Whatever our ideas may be as to the necessity or desirability of a tariff on hay, we shall all probably agree that the Commission was bound to reach a decision which did not interfere with the interests of the nation at large as those interests had been interpreted by the Dingley Tariff Act.

2. Vested interests

Less justifiable to the present writer appear to be those cases in which the Commission has by its decisions upheld existing methods of production or distribution in which certain sections or certain classes of producers have appeared to have a particular interest at the expense of new and cheaper methods which were coming into use. Probably the best illustration of this class of cases comes from the cotton traffic.¹

By the method commonly employed throughout the South, cotton after being ginned at the plantation gin is made into a square bale having a density of about 12½ pounds to the cubic foot. The rates are the same per 100 pounds for this uncompressed cotton as they are for cotton which has been further compressed. But before cotton is carried long distances it is usually taken by the carrier to a compress situated on the route, and frequently owned by the railroad, and the plantation bales are further compressed until the average bale has a density of about 23 pounds per cubic foot. When compressed in this way about 25,000 pounds of cotton can be conveniently carried in a single car.

For some years prior to the bringing of the complaint there had been coming into use a new method of compressing cotton into round bales by means of a patent device belonging to the complainant. The device was relatively inexpensive, costing from \$3500 to \$4000 each, and could be used in connection with the plantation or neighborhood gin. Cotton when compressed by this method has a density of about 45 to 47 pounds per cubic foot and about 45,000 pounds can be shipped in a single car load. When compressed by this method immediately after ginning it is in condition to be shipped to its final destination. It has been shown that cotton compressed by this method is in better condition when it reaches the

¹ Planters' Compress Company v. C. C. C. & St. L. R'y. Co. et al., 11 I. C. C. Rep. 382.

manufacturer and is more in demand than when baled by the usual methods.¹

Owing to the fact that a much larger quantity of cotton in round bales could be shipped in a single car load than when it was sent in the old-fashioned square bales, the carriers made defendants in the case had for two years prior to 1900 given a net rate of 20 cents per 100 pounds to the cotton compressed by the complainant's process, while at the same time cotton in square bales had been charged a rate of 30 cents per 100 pounds. The complainant asked that this adjustment of rates be continued. It was shown that steamship companies exporting cotton granted lower rates on round-bale cotton than on cotton baled in the ordinary way. "This," acknowledged the Commission, "is because its greater density permits a greater weight to be loaded in the same space, and perhaps to some extent because it is easier to handle."

In spite of the obvious advantages of transporting cotton in the more compact bales, the majority of the Commission were opposed to granting lower rates to car load shipments of 45,000 pounds or more than were granted to car load shipments with 25,000 pounds as the average car load. The reasons for the decision were long-standing custom and the fear of monopoly. It was said that to adjust rates in the way asked for by the complainant would encourage the use of complainant's device throughout the South in order to get the benefits of the lower rates. This in turn would result in having cotton compressed at the gin houses

¹ See for a discussion of the relative merits of the square and the round bale, H. Hammond, The Handling and Uses of Cotton, in Bulletin No. 33, Office of Experiment Stations, U. S. Dept. of Agric. pp. 360–365; also the present writer's, Cotton Culture and Cotton Trade, Pubs. American Econ. Assoc., New Series, No. 1, pp. 351–355.

and this, thought the majority of the Commissioners, would make difficult the classification of cotton and its separation into different grades. They did not question the contention of the complainant that the costs to the carrier of shipping cotton compressed by the complainant's method were less than when the older method of baling was used, but they claimed that this did not impose upon the carrier "the obligation to recognize this saving of expense by a corresponding reduction of charges." The majority held that the thing of chief importance was to secure reasonable rates on commodities in the form in which they were commonly prepared for transportation, and held that when rates so established were reasonable, the same rates did not become unreasonable to the shipper who preferred to prepare his shipment in a form which might afford the carrier a greater profit per hundred pounds. "To adjust rates on different articles on the basis of comparative cost to the carrier," said the majority report, "would involve a wide departure from accepted theories of rate making: to adjust rates on the same article with reference to cost of carriage under different conditions would be still more radical."

Commissioner Prouty wrote a vigorous dissenting opinion in the case in which he argued for the logical application of the cost of service principle. He openly accused his colleagues of trying to shield themselves behind trivial and irrelevant analogies and of reaching a decision which tended to hinder the course of industry and progress. He declared that car capacity more than any other one thing was generally made use of by the carriers in determining rates and said that the Commission had "repeatedly recognized the substantial accuracy of this position." He de-

clared that he agreed with the complainant that if 30 cents per 100 pounds was a reasonable rate for transporting 25,000 pounds of cotton in a car, then it was entirely unreasonable to apply that rate to a car of 50,000 pounds. The carrier would be compelled to haul two car loads of the square-bale cotton to earn the same amount of money which it received for a car load of round bales.

Taking up the arguments made by the majority, Mr. Prouty discussed the objection made to cost of service as follows:—

It is said that cost of service is not the test of a reasonable rate. This is undoubtedly true in many cases. There are many instances in which there is no intimate connection between cost of carriage and the rate charged for that carriage. But with respect to a staple commodity like cotton I believe that there should be a very intimate connection between cost of carriage and the rate charged the public, and that if in any way the cost of carriage has been or can be actually reduced one-third, the public should be given the benefit of that reduction.

Mr. Prouty next pointed out what was likely to be the effect of the majority decision on the business of the complainant and on progress in the direction of reducing the costs of marketing the cotton crop.

The only advantage of the round bale is that it produces a bale of greater density and thereby reduces the actual cost of movement materially. If this advantage in transportation is not recognized, it has no value and cannot come into use. If the railways decline to accord to this form of compression the saving in cost of transportation which it actually makes, or some reasonable part of it, that bale never can be offered for transportation in very large quantity.

Mr. Prouty also pointed out that recognition of the complainant's claim would redound to the advantage of several other owners of devices for making compact bales. So far from creating a monopoly, it would tend to modify the semi-monopoly which the railroads enjoyed of compressing cotton *en route* in their own compresses.

It has already been noted that it has been the general practice of the carriers, upheld by the Commission, to give the same rates and classification to wheat and to wheat flour. In two cases,1 however, which have been brought before the Commission that body has upheld the carriers in their practice of charging five cents more per hundred pounds for transporting flour from points in Missouri and Kansas to points in Texas than they charged for carrying wheat from the same points of origin to the same points of destination. The carriers made their defence partly on the basis of differences in the values of the two commodities and partly on differences in the cost of service. The Commission could not sustain these arguments, since they would have been applicable under any circumstances, and it was shown that the same carriers as were made defendants in this case were transporting wheat and flour in other directions at the same rates on both commodities, and such an equalization of rates, as we have just said, has frequently been upheld by the Commission.

The investigations conducted by the Commission in these cases showed that in both instances the five-cent differential rate on wheat had been made for the purpose of protecting the large and growing milling industry of Texas. The Texas mills it was said widened the market for Texas wheat growers but were at a disadvantage compared to St. Louis mills owing to higher costs of fuel, labor, and the like. The de-

¹ Kauffman Milling Co. v. Mo. Pacif. R'y Co. et al., 4 I. C. C. Rep. 417; 3 I. C. R. 400. Mayor and City Council of Wichita, Kansas v. Mo. Pacif. R'y Co. et al., 10 I. C. C. Rep. 35.

fendants claimed that the complainants were not injured by the existence of the differential since they could still compete in the Texas markets. The majority of the Commission decided to uphold the differential in the first of the above cases because of its long continuance; because the milling industry of Texas was in a flourishing condition and had had beneficial effects on raising the price of wheat in Kansas and Missouri as well as in Texas, and because the differential seemed necessary in order "to place the competitive milling interests upon a substantial parity."

Commissioner Morrison dissented from the conclusions of the majority of the Commission in this case. He said that the decision assumed "to put the millers of Texas on a parity with their competitors in the Texas markets, by depriving Missouri and Kansas mills of whatever advantages they have in their favorable location." This he pointed out was in direct conflict with previous decisions of the Commission.

In the second of the above cases the Commission abandoned its contention that the differential on wheat was necessary to maintain competition between Texas mills and those in Kansas and Missouri. On the contrary it declared that "the Commission has no more authority to place competing millers in different states upon precisely the same footing than it has to equalize conditions in all localities and in every industry." It nevertheless upheld the differential on the ground that many new and flourishing mills had recently sprung up in Texas as a result of an accidental crop yield and that to equalize the rates on wheat and flour would handicap these mills in their competition with the Kansas mills. The Commission therefore announced that it must "decline to disturb

relations of rates" since such disturbance "could scarcely fail to be injurious to important vested rights." It also declared that the maintenance of competition between the Texas mills and those in Kansas was a direct benefit to the Kansas farmers in that it tended to raise the price of their grain, and the Commissioners said: "Anything which increases the value of the products of the soil to the producer seems so desirable a result, that if the Commission was endeavoring to adjust the conditions investing various localities, that which led to the prosperity of the agriculturist must receive favorable attention."

Whether one looks at this case from the standpoint of the Texas millers or of the Kansas wheat growers it is apparent that the Commission's decisions were based on the special and peculiar interest of these particular classes of persons.

In spite of the fact that neither Los Angeles nor San Bernardino, California, is situated on the coast, the Commission decided in the case of A. W. Holdzkom v. Michigan Central Railway Company et al.¹ that the carriers from the east were justified in considering Los Angeles a "terminal point," enjoying the benefits of water transportation from the east and therefore entitled to the same rates as San Francisco received while San Bernardino must continue to pay the through rates to Los Angeles plus the local rates from Los Angeles to San Bernardino. The Commission set forth its reasons for permitting this discrimination as follows:—

In coming to this conclusion we have been largely influenced by the consideration that while this action upon the part of the carriers has certainly worked a preference in favor of Los Angeles as against towns like San Bernardino, it has at the same time benefitted southern California as a whole. The result has been to transfer the wholesale business of southern California in so far as it is transacted upon the Pacific Slope, mainly from San Francisco to Los Angeles. Before Los Angeles enjoyed this rate San Francisco jobbers covered that territory. Now they have given place to the jobbers of Los Angeles, and in many instances San Francisco houses have established branches at Los Angeles. It is probable that this arrangement results in somewhat cheaper prices for southern California than would be secured by a distribution from San Francisco, since the cost at the two centers of distribution is now the same, while the expense of distributing from Los Angeles is somewhat less. While, therefore, Los Angeles has been benefitted, it would appear that this whole section shares to an extent in such benefit, nor is it easy to perceive how San Bernardino has been materially injured since that city could not become a jobbing center as against San Francisco under original conditions.

The grounds for the Commission's decision are therefore the interest of southern California as a whole. That the decision, while favorable to the jobbers of Los Angeles and perhaps to the consumers of southern California, was opposed to the interests of San Francisco jobbers was a fact which apparently received little consideration from the Commissioners.

In all the cases which we have considered under the heading of class and sectional interests, the Commission does not seem to have been guided by what it terms "fundamental principles." The cases have been disposed of, as the Commissioners said in the Kauffman Milling case, "with a view to what is best for the public interests immediately concerned, and upon facts found to exist rather than upon theories of transportation." Perhaps the most fundamental consideration involved was the desire to preserve competition among producers or producing sections, and this the Commission has undertaken to do even when at times it has been necessary to depart from economic principles and to sacrifice in a measure the interests of the consumers.

VIII. FAIR RETURN ON INVESTMENT

During recent years there has been an urgent demand on the part of many writers and public officials that the Federal government attempt to make a valuation of the physical property of the railroads of the United States and that it also take steps to control the further issue of railway securities. This demand, representing what Professor Adams calls "the public interest in the property accounts of railways," as opposed to the interest of the railway management and the interest of the investor, "rests upon the fact that a reasonable rate for transportation services is a rate which contributes a reasonable return upon necessary investments."

The argument for a physical valuation of railway property and a limitation of railway securities may be briefly stated as follows. The railways are common carriers, concerned in the business of performing a service essentially public in character. Their corporate existence is furthermore due to franchises granted by the public authorities. In the performance of a public service their owners are not entitled to charge more than a fair return upon the actual capital invested and this can only be known when the value of the property has been ascertained. In the future the issues of railway securities should be made to correspond to the actual investment of capital. Rates in general can then be so regulated as to yield only normal rates on the capital investments and on the par value of the new stock issues.

¹ Twenty-first Annual Report on the Statistics of Railways in the United States (1908), p. 11.

1. Development of the theory

This theory of rate making received but little attention during the early years of the existence of the Interstate Commerce Commission. It was, however, not entirely overlooked; it was dealt with, tho in a purely incidental way, in some of the earlier decisions. Thus in one case 1 where the complainants had urged that the defendant's rates on wheat were too high when compared to rates on the same commodity charged by other roads, and the defendant had pleaded as an excuse the high cost of constructing and maintaining the road and the low rate of return on its paid-up stock, the Commissioners had replied that the roads with which the complainant had made comparison

have a greater variety of local and way freights, and are not compelled to depend, as is the defendant, so largely upon what they receive for the transportation of any one local commodity, such as wheat. They, therefore, derive revenue from these other sources of local and way freights to a much greater extent than the defendant, and can with confidence rely upon them, and for this reason alone can safely make their rates less than the defendant.

A more significant utterance appears in the Commission's report on Alleged Excessive Freight Rates and Charges on Food Products.² The shippers had advanced the claim that the railway rates from the West should be so adjusted as to enable farm produce to be sold in the East at a profit. The Commissioners could not admit that the railroads were bound so to adjust their rates that "shippers may in all cases realize actual cost of production." Such a basis of

¹ Milton Evans et al. v. The Oregon Railway and Navigation Co., 1 I. C. C. Rep. 325.

^{2 4} I. C. C. Rep. 48; 3 I. C. R. 93.

rate making they said "will hardly stand the test of fair dealing. It would compel those who invest in or operate railroads to assume and bear the losses resulting from the improvidence, mismanagement, or unprofitable employment of others." At the same time the Commissioners declared that the roads should offer such rates, if they are "fairly remunerative," as would encourage and warrant the movement of commodities and such a rule was particularly applicable to the staple agricultural commodities. The Commission was careful to state that in deciding what rates were "fairly remunerative" it must not be implied that a dividend on watered stock was to be included, and they laid down this further principle:—

In fixing reasonable rates the requirements of operating expenses, bonded debt, fixed charges, and dividends on capital stock from the total traffic are all to be considered, but the claim that any particular rate is to be measured by them as a fixed standard, below which the rate may not lawfully be reduced, is one rightfully subject to some qualifications, one of which is the obligations must be actual and in good faith.

Another limitation on the principle of fair remuneration is stated in one of the Standard Oil cases ¹ where it is said that a carrier

may establish its rates to yield fair remuneration for its services, subject to prescribed limitations, but it may not treat every division of its system serving a common territory as an independent property, and vary its rates to suit the conditions of each piece of property, and thereby arbitrarily exact charges that make a profitable market for one portion of its patrons and that exclude others similarly situated from the same market.

The limited use which the Commission made of the principle that rates must be so limited as to yield only normal returns on investment during the early

¹ Rice, Robinson & Winthrop v. The Western N. Y. and Penn. R. R. Co., 4 I. C. C. Rep. 131; 3 I. C. R. 162.

years of its existence doubtless finds its chief explanation in the fact that nearly all of the earlier decisions had to do with rates on particular commodities rather than with an entire schedule of rates. Altho, as we shall see, the Commission has made a limited use of this principle in dealing with rates on a few important commodities, it has never been seriously urged by members of the Commission or others that this theory of rate making could be rigidly applied to determine what was a reasonable rate on a specific commodity carried a specific distance. The principle has found its widest application in those cases in which the Commission has had to consider the question as to whether or not a general advance in rates, or at least an advance on an entire class of commodities, by a single railway system or by several railroads acting in conjunction, was legitimate.

2. Rates in general

In seeking to make use of the principle that a reasonable rate is one that yields a fair return on capital actually invested, the Commission has been greatly handicapped by the fact that there has never been furnished to it any authoritative statement as to what is the actual capital investment of our railroads, either singly or in the aggregate, or as to what constitutes a reasonable rate of return on this capital. The United States Supreme Court in the Nebraska Freight Rate case 1 established the rule that a carrier is entitled to earn a "fair return upon the value of that which it employs for the public convenience," but this, in the absence of any standard for determining what is that value, is, as the Commission

says,¹ much like reasoning in a circle, since the value of a railway's property is in large part dependent on the rates which it is permitted to charge. The Commission expressed the opinion in this case that the cost of reproducing a railway's property could not well be made a test as to the value of the investment, tho it might furnish some assistance in determining that value. Even this standard of measurement is lacking, and the Commission stated the difficulties which it confronts in seeking to determine what constitutes a reasonable rate schedule in these words:—

It is plain that until there be fixed either by legislative enactment or judicial interpretation, some definite basis for the valuation of railway property and some limit up to which that property shall be allowed to earn upon that valuation, there can be no exact determination of these questions.

In the absence of such official standards the Commission in seeking to judge as to the reasonableness of a proposed general advance in rates has thrown upon the railroads the burden of proving that they were not prospering under existing rates. The most notable decisions of this sort were handed down only a few months ago and are still fresh in our minds; but the principles upon which the Commissioners acted in refusing to allow the recent proposed advances in freight rates are not new and need have caused no surprise to those who have followed the Commission's line of reasoning in earlier cases. In the case which we have just been considering the carriers had declared that rates had been reduced in bad times; the prices of materials and labor had risen with the return of prosperity; the roads hence were entitled to raise their rates. The Commission itself has so

¹ Proposed Advances in Freight Rates, 9 I. C. C. Rep. 382.

succinctly stated the argument of the carriers that its words deserve to be quoted.

The present prices of commodities are high, therefore they can pay a higher freight charge. Times are good and railroads should share in the general prosperity; but high prices of materials and labor add to the expense of operation and gross revenues must therefore be increased.

This argument, it will be observed, is a combination of cost of service and of value of service, or "charging what the traffic will bear" arguments. So far as the cost of service argument is concerned its validity would of course depend on the evidence as to increased costs submitted by the carriers. If value of service is, however, to be made the test, and if any meaning is to be given to this elusive term, it is hard to see why the carriers' argument is not conclusive. For in times of prosperity and high prices the railroads certainly do by means of the transportation of commodities increase the value of service both to producers and consumers. We have already seen 1 that the Commissioners permitted the increase in rates to be made in the case of iron and steel on the ground that the rates on these commodities had been reduced because of business depression.

With reference to other commodities, particularly grain, the Commission shifted its ground. It declared that it was not called upon to consider alone the question as to whether the proposed rate was reasonable when "estimated by the cost and value of the service, and as compared with other commodities," but that it must decide whether the rate was "reasonable in the absolute, regarded more nearly as a tax laid upon the people who ultimately pay that rate." This statement might seem to introduce into the Com-

Quarterly Journal of Economics, November, 1910, vol. xxv, p. 36.

mission's decisions a new theory of rate making, viz. the tax principle so much emphasized by Professor Cohn.¹ That this was not the intention of the Commissioners, however, is shown by their further statement that every inquiry into the reasonableness of a given rate "involves the idea of some limit beyond which the capital invested in railways ought not to be allowed to tax other species of property."

While the Commissioners could not, in the absence of any judicial or legislative standard, declare just what the limit should be, they applied this apparently negative conclusion to the case under discussion in the following manner. The statistics of earnings and expenses of the leading lines covered by the investigation showed that these roads had shared in the general prosperity of the country simply by an increase of their traffic. Railway transportation being subject to the law of increasing returns, this increase of traffic had caused an increase in the net earnings of the roads. The investigation further showed that rates in general, and on grain in particular, had not been reduced during the period of financial depression. The Commission therefore held that rates long established, which had been fixed by competition and were fairly remunerative, could not be advanced merely in order that in this way the railroads might share in the prosperity of the country.

The report of an investigation made by the Commission In the Matter of Class and Commodity Rates from St. Louis to Texas Common Points, etc.² is in many respects analogous to the case we have just

¹ G. Cohn, Die englische Eisenbahn Politik der letzten zehn Jahre, pp. 65-84. For a discussion of Cohn's theory see Professor Taussig's Contribution to the Theory of Railway Rates, Quarterly Journal of Economics, vol. v, pp. 438-465.

^{3 11} I. C. C. Rep. 238.

considered. The roads in the Southwest had announced an increase in rates and gave as their reasons for the advance: (1) an increase in "the cost of labor, materials, and everything which enters into the construction and operation of a railroad"; (2) an increase in the prosperity of the country, in which it was said the railroads were entitled to share. As a proof of the increase in prices the railroads offered a comparison between prices paid in 1903 and those paid in 1897, to which the Commission made answer:—

It is evident that a comparison between the panic prices of 1897 and the inflated prices of 1903 would produce startling results of this nature and it is equally evident that such comparisons are utterly worthless for determining a legitimate basis for freight rates.

The Commission instituted an investigation of its own into the relative prices paid by the railroads for steel rails, equipment, fuel, and labor in the years 1892, 1896, 1902, and 1903 and concluded that "the total cost of moving a ton of freight one mile upon the lines of these respondents as a whole was probably as low in 1903 as it had ever been."

In answer to the claim of the carriers that they should share in the prosperity of the country the Commissioners replied:—

To the proposition that the railroads of this country are entitled to share in the prosperous conditions of the present we entirely assent. . . . When the claims of these respondents are carefully examined that is not at all the thing for which they contend, but rather that because the prices of the commodities which they transport have advanced the rate of transportation should also be advanced. To that we do not assent. The freight rate is not a commodity the price of which should ordinarily vary with the price of the commodities which are transported. A railroad may not advance its passenger fares simply because the people who ride are making more money. The question is rather whether the fare charged allows the carrier a fair return for its services.

The Commissioners admit that if the roads reduce a rate to enable a manufacturer to continue in business during a business depression "there is no reason why with the return of prosperity the rate should not be restored," but this was not the case with the advance announced. To show how illogical was the argument that the announced increase of rates was justified by the increase of prosperity the Commission quotes the argument of the representative of one of the roads that owing to the ravages of the boll-weevil in Texas his road did not get the usual amount of cotton for transportation and,

for these reasons it had become necessary to advance rates in order to obtain sufficient revenue with which to operate the road and pay a fair return upon the investment. Here, therefore, we have in the same case and by parties of the same general system a claim upon the one hand that these advances are justified by general conditions of prosperity and upon the other hand that they are justified by general conditions of adversity.

The way in which the roads should share in the prosperity of the country the Commission then proceeds to indicate.

Railroads should share in the general prosperity. They should do this partly by being able to advance those rates which have declined under commercial conditions. They should do it still more by the increased traffic which they obtain. In times of prosperity when money is plenty and business is good people ride more, buy more, new industries are being established and old industries are active, traffic increases and out of such increased traffic the railway obtains, by automatic action so to speak, without any advance in its rate a large share in the general prosperity.

Declining to admit, therefore, that the proposed advance was to be justified either by cost of service arguments or by increases in the values of the commodities transported, the Commission turned to the question as to whether the rates charged before the advance was made were sufficient to allow the carrier a fair return for the services rendered. The statistics as to cost of reproducing the property and as to the increase in gross and net earnings between 1892 and 1903 showed on the whole favorable conditions. Most of the roads were shown to be earning six per cent or more on the cost of reproducing the property. The Commission nevertheless hesitated to issue an order for a restoration of rates to their former level, their hesitation being due to the fact that in spite of improved conditions the earning power of these roads was still below that of the roads in other parts of the country.

The final test is the actual result of actual operations and it cannot be denied that the financial showing of these respondents, especially those roads which operate in the state of Texas, is not favorable. The railroads embraced in this discussion are mainly confined to Groups VIII and IX [of the Commission's classification]. If these groups are combined and treated as one, the average net earnings per mile are much lower than those in any other group in the United States. The percentage of cost of operation to gross revenue is larger than in any other group in the United States. While many of these respondents are yielding a munificent return upon any fair basis of valuation, and while most of them are earning six per cent, at least upon the cost of reproducing the properties today, nevertheless it is true that many of them do not now and have not for years paid dividends to their stockholders. This is partly due to the fact of over capitalization and partly, perhaps, to the peculiar state of the law in Texas, which as applied to these railroads virtually requires that the net earnings be retained in the property, as previously explained. But in any view of the matter the fact cannot be overlooked that those Texas lines as compared with other roads in this country are poor.

While firmly convinced that the advances had been due to rate agreements among the carriers, the Commissioners concluded that a general reduction ought not to be ordered "unless it is perfectly clear that the rates in effect are unreasonable."

The statement just quoted from the Commission's decision that the rates might be too low since some of the roads had been unable to pay dividends on stock which was at least in part "water," might lead one to suppose that the Commission was ready to concede the right of a road to earn dividends on watered stock as well as on capital actually invested. We have already seen that this is not the case. Additional proof, however, is furnished by two other cases which have come before the Commission in which the plea was made that if rates were reduced the carriers would be unable to pay dividends. The answer of the Commission was practically the same in both cases. In the Danville case they said concerning the common stock of the defendant carrier:—

It does not appear that the persons to whom this stock was originally issued ever paid one dollar in actual value for it. It simply appears that the stock is out-standing. This is not enough. Something more is needed when a claim of this kind is set up than the mere fact of the existence and amount of capitalization.

The Commission has, however, gone farther than merely to hold that there is no obligation on the part of carriers to maintain high rates in order to pay dividends on stock which represents no real investment. In at least one case ³ it has put itself on record to the effect that railway managers who have made unwise ventures are not entitled to exact unreasonably high charges from shippers in order that their roads may become profitable investments. The defendant in this case sought to justify a greater charge for a short haul than for a long haul on the ground that com-

¹ Above, p. 174.

² Grain Shippers' Association of Northwest Iowa v. Ill. Cent. R. R. Co., 8 I. C. C. Rep. 158. City of Danville v. Southern R'y Co., 8 I. C. C. Rep. 571.

³ Cary v. Eureka Springs R'y Co., 7 I. C. C. Rep. 286.

petition necessitated a low rate for the long haul, while if the rate for the short haul were made equally low the earnings of the carrier would be insufficient to yield a fair return on the capital investment. The financial statements of the road for several years past were submitted in proof of this statement. The Commission had no authority to prescribe a rate for the future owing to the decision of the United States Supreme Court to that effect. It nevertheless recommended a reduction of the short haul rate in this case and said:—

That transportation charges should be liberal until the earnings are fully sufficient for a fair return on actual investment will hardly be questioned, but it does not follow that rates long maintained and grossly discriminative must be continued and may be lawfully exacted year by year, tho it be assumed that railroad investment of property is so much more inviolable than other property that its owners must bear none of the losses or disadvantages incident to industrial and financial disarrangement, and that transportation charges are never excessive when the annual net earnings are less than the amount necessary to the reasonable annual income on such property and investment.

So far as a general schedule of rates is concerned, therefore, it may be said to be the opinion of the Commission that these rates may be only high enough to earn a fair return upon a *legitimate* investment of capital in the construction and operation of the road.

3. Particular rates

A charge made for hauling a particular commodity or for the performance of a specific service may not properly be judged by the same standard as is applied to an entire rate schedule. Some rates need to be lower, while others may properly be higher than the average rate needed to yield a fair return upon the capital investment. In the case of the Central Yellow Pine Association v. The Illinois Central Railroad et al., the Commission has well explained why in measuring the reasonableness of a rate on a given commodity different standards must be applied than are used to measure the reasonableness of an entire system of rates.

The defendants had attempted to justify an advance in the rates on lumber shipped from points in the southern states to places on the Ohio river and beyond, partly on the ground of an increase in costs of operation, but mainly on the ground that "lumber, considering its character and the conditions attending its transportation, was not yielding its proportion of the revenue required by the defendants to meet their expenses."

To this argument the Commission replied: —

The question of the reasonableness in this sense of a rate on a single article of traffic is one of almost insuperable difficulty. . . . The value of the entire property of a road employed for the public convenience can shed but little, if any light upon the question whether the rate on a single one among thousands of articles of traffic yields its proper proportion of a fair return on that value. The rate on one article of traffic may be reasonably high and the carrier fail to earn a fair return on the value of the entire property employed for the public convenience because of unreasonably low rates on other traffic, and vice versa, the rate on one article of traffic may be unremunerative or unreasonably low and the return to the carriers from its entire business may be fair or reasonably high, the deficiency under the rate on one article of traffic being made up by the rates on the balance of the traffic. . . . While the Supreme Court has undertaken to point out "certain elements" to be considered in determining the reasonableness of an entire system of rates, it has not named any as shedding light upon the reasonableness of a rate on a single commodity like lumber. It is evident that such elements are widely variant in the two cases. Where an entire system of rates is involved,

the principal, if not the only question, is whether the revenue yielded by the rates on all traffic is a "fair return on the value of that which is employed for the public convenience"—a question, the determination of which,—as we have shown, can have only a very remote, if any, practical bearing on the reasonableness of a rate on a single article of traffic. On the other hand, where the rate on a single article is in issue, the question (which could not arise in the former case) whether the rate is unjustly discriminatory or unduly preferential, may be presented, and the reasonableness of the rate depends upon the value, volume and other characteristics affecting the transportation of the particular commodity to which it is applied.

In the present case the majority of the Commission decided that neither the increase in the cost of operating the roads, nor the carriers' need for increased revenues, nor yet the increased prosperity of the lumber manufacturers, warranted the increase of rates. The advance in rates was due to concert of action between the carriers and this concert of action had eliminated competition. The Commission held that the rates should be restored to the level at which competition had left them.

Practically the same arguments were advanced and the same conclusions reached in another lumber case, that of *H. H. Tift et al. v. Southern Railway Company et al.*¹ The same principle is also expressed, tho perhaps less clearly, in several of the earlier decisions.²

The Commission has given weight, however, to the argument that need of revenue may justify a carrier in maintaining discriminatingly high rates under certain exceptional circumstances. Certain of the southern states have within recent years established uniform passenger rates of 3 cents a mile on the roads

¹ 10 I. C. C. Rep. 548.

² See for example Jerome Hill Cotton Co. v. M., K. & T. R. R. Co., 6 I. C. C. Rep. 601. Brewer & Hanleiter v. L. & N. R. R. Co., 7 I. C. C. Rep. 224.

within their borders. The roads have protested against lowering their interstate rates to the same figure, claiming that to do so would reduce their revenues to such a point as to yield them less than a fair return on their investment. Very reluctantly the Commission has permitted, in some instances, the higher interstate rates to remain in force. In one 1 of the cases the Commission said:—

A reduction of this interstate passenger fare would not contribute to the development of the section or increase materially the passenger business of the line. Reducing the fare to three cents per mile would render the earnings of this part of the system less than the average upon the whole system and less than the average of other roads in that part of the country.

In another case ² where the Commission decided that the interstate rate complained of was not unreasonable the Commission added: "What the company is entitled to ask is a fair return upon the value of that which it employs for the public convenience."

Of more significance, however, is the Commission's statement in the case of Board of Trade of the City of Hampton, Florida v. Nashville, Chattanooga & St. Louis Railway Company 3 where financial necessity was made one of the excuses by the defendant for accepting rates at competitive points which did little more than cover the operating expenses and which could therefore not be extended to non-competitive points. The Commission replied:—

Rates cannot be said to be reasonable which are not reasonably remunerative to the carrier, and rates which do not pay their full proportion of operating expenses, fixed charges and reasonable dividends are not *per se*, or in and of themselves, reasonably re-

¹ A. L. Artz v. Seaboard Air Line Railway, 11 I. C. C. Rep. 458.

² R. C. Brabham et al. v. Atlantic Coast Line R'y et al., 11 I. C. C. Rep. 464.

⁸ I. C. C. Rep. 503.

munerative. While it may be that carriers, under certain exceptional conditions, are justified in accepting rates which pay anything in excess of operating expenses or the cost of movement, yet as a general rule all traffic should be made, if possible, to pay its due proportion of operating expenses, fixed charges and reasonable dividends.

It may then be held to be the well-established opinion of the Interstate Commerce Commission, as well as of the courts, that the test to be applied to determine the reasonableness of an entire system of rates is whether these rates yield only a "fair return on the value of that which is employed for the public convenience." Much still remains to be done in the way of measuring that value, but the Commission at any rate is clearly inclined to the opinion that it must include only bona fide investments of capital. Tho the same test cannot be applied with the same degree of accuracy in the case of particular rates, the principle may be said even here to have found recognition that unless exceptional conditions prevail, a particular rate must be so arranged as to cover the commodity's "due proportion of operating expenses, fixed charges, and reasonable dividends."

IX. GENERAL SUMMARY AND CONCLUSIONS

We have attempted in the course of these papers to set forth as fully as space would permit the theories of the Interstate Commerce Commission concerning the bases of railway charges. These views have been enunciated in the course of many decisions rendered during a period covering two decades. Since the membership of the Commission has been changing in the meantime, the theories do not always represent the changing views of the same individuals. In spite of the obvious difficulty in attempting to re-

state and classify other men's opinions, it is believed that the preceding discussion, in which the fundamental principles in each case have been given as frequently as possible in the Commission's own words, has not greatly misrepresented or exaggerated the views of that body.

We must now attempt such an interpretation of the Commission's views as shall show how the leading principles revealed by our classification may be in a large measure harmonized and reduced to their lowest terms. If this can be done in a satisfactory manner we shall be able to indicate the tendencies which are likely to be followed in our system of government-regulated railway rates in future years. It is perhaps unnecessary to say that the members of the Commission must in no degree be held liable for this interpretation. The present writer assumes full responsibility.

The Commission began its work with the idea that value of service was the underlying principle of railway rates. It was unable, however, to furnish such a precise definition or explanation of this term as would enable it to be used as a concrete measure of a reasonable rate. How uncertain is the meaning of the phrase and how different may be the interpretation of it given by the railway manager from that which the Commission clearly had in mind is shown by the use made of it to defend the rate on cotton charged by one of our southwestern roads.1 The vice-president of the road had stated before the Commission that the rate in question had been made in accordance with the principle of "the value of the service." Upon being asked to explain the method of applying the principle in this case, he replied that two rules had been followed by his company: (1) "to give

¹ Jerome Hill Cotton Co. v. M. K. & T. R. R. Co., 6 I. C. C. Rep. 601.

[secure] the largest revenue the traffic will bear "; (2) "to find a market for the stuff." Keeping both these principles in mind, he declared that "any rate is reasonable under which traffic will move absolutely. It all moves out every season. If it moves out, it must be a reasonable rate."

If this pragmatic explanation of what constitutes a reasonable rate be accepted as a fair indication of what we may expect when rates are fixed according to value of service, it is plain that we shall find that value of service is merely equivalent to the well-known monopolistic principle of charging that price which will yield the highest net return. It is also evident that the Interstate Commerce Commission could never consent to the use of such a principle as a basis for determining reasonable rates.

The great advantage which cost of service has over value of service is that it furnishes a concrete standard of measurement. It states a quid pro quo as a reason for making the charge. It is the standard of reasonableness which has been adopted in all our economic relations. To make charges less than costs would mean that other commodities or other industries would have to make up the deficiency, or else the railroads of the country would run at a loss. To charge more than costs, on the other hand, would mean that the railway industry was forcing other industries to surrender to it a portion of their legitimate earnings. The fact that it is universally accepted in other transactions as a test of reasonableness explains why the Commission has naturally turned to a consideration of costs when the equity of a given rate has been brought in question, and it also explains why railway officials have naturally made cost of service their defence whenever their rates have been attacked.

At the outset of its labors the Commission was not inclined to place much confidence in cost of service as a principle for determining rates. The feeling that rates fixed in this way would prevent the free movement of certain commodities explains in part the attitude of the Commissioners, but the main objection has seemed to be the practical impossibility of determining the exact cost of transporting a particular commodity. That there are obstacles—insuperable ones - to any direct determination of the costs of performing a specific service in transportation no one familiar with the subject would deny. It has not been by means of a direct determination of the costs, however, that the Commission has sought a solution. The method followed, as we have seen, has been that of comparison. The ascertainable costs of moving a certain commodity have been compared with the costs of moving the same commodity in a different manner or under different circumstances. The method of comparative costs does not yield absolutely accurate results but it is oftentimes sufficient for practical purposes and we must remember that economics, like law, does not concern itself with trifles.

The method of comparative costs has not always been applicable however. The Commission has then been confronted with the task of discovering some other means of measuring rates which would yield the same results as would be attained by a comparison of costs, were that method practicable. In some cases, as we have seen, distance may be used as a means of measuring the reasonableness of rates. Considered as the sole element in the determination of rates distance would of course yield unsatisfactory results; but it is nevertheless, as the Commission says, "in the absence of other influences a controlling

element." Its value as a measuring instrument lies not in the fact that it is independent of costs but that in the absence of other influences it reflects costs.

The same thing may be said of the effort of the Commission to preserve for a place its natural advantages of location. A place can have no advantage of location which a carrier is bound to respect other than that which is due to its ability to place its products on the market at less cost than can its competitors. Rates based on the principle of recognizing natural advantages of location are therefore true to the cost of service principle.

Even in the absence of these indirect methods of determining costs, the Commission has found it possible to reach the same goal by other methods. It is a fundamental principle of economics that free and untrammeled competition, operating over a long period of time, tends to reduce prices to a cost basis. We have therefore only to apply this principle to railway rates to see that rates which have been fixed by competition, provided that this competition has been of a normal sort, will be the same as they would be if all the costs of service had been calculated and rates had then been based on costs. In spite of all the inconsistencies and contradictions involved in the Commission's discussion of competition, - many of which, as we have observed, are due to an effort to preserve the spirit of the law, - we see running throughout the Commission's decisions a tendency to fix rates at the point where a normal and healthy struggle between competing interests has tended to leave them. Competitive rates are therefore true to a cost of service principle.

One other alternative has been presented to the Commission in certain cases where it has been unable to calculate the costs of service and this, too, has been in accordance with well-known economic principles. What the economist always means by cost price, is that price which covers not only actual expenditures made in production but which also leaves a normal rate of return upon all the capital invested. In those cases, therefore, in which the Commission has been called upon to deal with a whole system of rates: where it would have been clearly impossible to have calculated all the costs; where even the comparative method was lacking because the increase of rates had been made general, and where competition was not present, — it has still been possible to ask whether these rates have yielded the same results, measured by their effect on earning power, as would have resulted if the cost of service principle had been applied.

In accepting different methods of measuring the reasonableness of railway rates the Interstate Commerce Commission has been confronted with the same difficulty that we find when we come to measure the size or magnitude of physical objects, and it has solved the problem in the same way. In some cases we use dry measure, in others liquid measure, in others cubic measure, and in still others measure by weight. In the metric system, the fundamental unit is the metre, but for practical purposes it is often convenient to use as the unit of measurement the litre or the gram, both of which are, however, based upon the metre. In the same way the Commission in its efforts to base rates upon cost of service has found it practically advantageous at times to use other methods of measurement, - distance, advantage of location, competition, fair return on investment; all of which in the sense in which they are employed by the Commission are merely expressive of cost relations.

Two other considerations emphasized by the Commission, value of commodity, and sectional or class interests, still remain to be dealt with. With reference to the last-named consideration it is hard to see how it can be made to fit in with any defensible theory of railway rates. Possibly the decisions rendered in most of the cases coming under this head are entitled to a degree of justification on the ground that the Commission was endeavoring to preserve competition among producers. Many of the cases in which value of commodity was made the basis of the Commission's decision might easily have been grouped under the heading of cost of service. This is because differences in rates, measured by differences in values of commodities, were allowed because the carrier was assumed to have accepted greater risks in transporting the more valuable commodities. In other cases where low rates were prescribed for low-grade commodities, for example such articles as are usually given commodity rates, it is obvious that the low rates could have been justified as easily on the principle that the costs of moving these commodities were low as on the basis of their low values. If the carriers had been able to show that it actually cost more to move a commodity having a low value than it did to transport one having a higher value it is doubtful if the Commission would ever have insisted that the less valuable commodity should receive the lower rate. In many cases we have observed that the values of commodities were allowed to affect rates because the Commission felt under obligation to maintain competition between establishments located at different points and engaged in turning out products in different stages of manufacture. Here again it is often possible to trace, indirectly through competition, a relation between the value of the commodity and the cost of transporting it. It is of course not pretended that all cases in which value of commodity is selected as the basis of rate making can thus be brought under the cost of service principle.

If the conclusion be accepted, which these articles seem to support, that the tendency of the Interstate Commerce Commission's decisions is, on the whole, towards a cost of service theory of rate making, there still remains the task of so stating a theory of rates as to bring in the various considerations which we have seen the Commission has emphasized as factors in rate making, and show how they can be related to the fundamental principle. It is perhaps well to say that nowhere has the Commission undertaken to state such a comprehensive theory of rate making.

1. In any system of government-made or government-regulated railway rates, it would seem that this fundamental economic principle should be kept

¹ These articles do not profess to discuss the decisions of the Commission since the Hepburn Act became operative or to consider the theories of other writers. It seems worth while, however, to call attention to the fact that a consideration of the later decisions of the Commission and especially its decision in the recent "advances in rates" investigation in western trunk line territory would do much to strengthen the idea that the Commission was tending towards a cost of service theory. Several books and articles by recent writers also tend to support the argument that cost of service is both practicable and desirable as a basis of railway charges. See especially the article by Commissioner Halford Erickson of the Wisconsin Railway Commission explaining the methods followed by that Commission; The Basis of Reasonable Railway Rates, Publications of the American Economic Association, Third Series, vol. ix (1908), pp. 95-102. See also Standards of Reasonableness in Local Freight Discriminations by Professor John M. Clark of Amherst College in Columbia University Studies in History, Economics and Public Law, vol. xxxvii, no. 1; also Professor M. H. Robinson's articles on Railway Passenger Rates and Railway Freight Rates, Yale Review, vol. xvi, pp. 355-399; vol. xvii, pp. 121-153. Professor Robinson believes that there is a tendency towards the fixing of rates on the basis of costs determined by a scientific and elaborate system of cost-keeping, but points out that at present this is not practicable owing to the unscientific character of railway accounts. It may be said that rates on the eastern trunk lines have for some years been fixed in accordance with a cost of service theory. See Professor Ripley's article, The Trunk Line Rate System: A Distance Tariff, Quarterly Journal of Economics, vol. xx (1906), pp. 183-210; reprinted in Ripley's Railway Problems, pp. 309-332. See also Johnson and Huebner, Railroad Traffic and Rates, vol. i, ch. xxi, and McPherson, Railroad Freight Rates, pp. 70-78.

in mind: to perform the service of transporting persons and goods with the least possible expenditure of social energy.

- 2. One transportation route or one transportation system should never be allowed to take from another route or system, merely as a consequence of competition, traffic which the latter route or system can carry at less expense.
- 3. Rates should be so adjusted as never to take from a place its natural geographical advantages of location; but natural advantages should not be so construed as to mean monopoly privileges.
- 4. Railway rates as a whole should just cover costs as a whole, allowing for a normal rate of return on capital actually invested, a normal return for labor of all sorts, and for depreciation, but not for betterments. This would not mean that superior efficiency in railway management was not entitled to reap the rewards of its superiority in the same way it does in the ordinary industrial establishment where competition rules. On the other hand, the rule must not be construed to mean that any investment in a railroad, no matter how foolishly or recklessly made, is entitled to exact high rates from persons and industries along the line in order to earn current interest rates or dividends. Railway property is not more sacred than other property, nor are railway investors immune from the consequences of their own acts.
- 5. Each commodity transported should, as far as possible, be made to defray its own share not only of operating and terminal costs but also of the fixed costs and dividends. It is possible under modern accounting methods to determine these costs with an approximate degree of accuracy for the principal

commodities and classes of traffic. The rates on other commodities may be determined by comparing their ascertainable costs with those of the principal commodities, and to a lesser extent by a comparison of the relative values of the commodities.

- 6. Differences in distance may be made a test of the reasonableness of differences in rates where other conditions appear to be similar; yet the general rule must be kept in mind that the the aggregate charge should increase as distance increases, the ton-mile rate should decrease.
- 7. Where the application of none of the above principles seems practicable, competition, which has been conducted in a normal manner over a period of several years, may be assumed to have established a fair relation of rates.
- 8. A reasonable rate is one which yields a reasonable compensation for the service rendered. If a given rate is reasonable in this sense, an increase in the price of the commodity or in the profits to the producer will not be a valid excuse for increasing the railway rate. The carrier will justly share in the increased prosperity of the producer by securing a larger traffic in this commodity.

The possibility of applying these rules to the business of railway transportation is proved by the fact that the application of every one of them can be shown by illustrations taken from the Commission's decisions. Their consistent application would mean that the railroads would neither tax the industries of the country nor have their own investments sacrificed; they would not build up one place or industry at the expense of some other place or industry; they would not take from some persons or commodities their proportionate share of the costs of transportation

and impose them upon other persons and commodities; and finally they would not by their system of rate making retard industrial progress or have their own development hindered by failing credit or lack of revenue.



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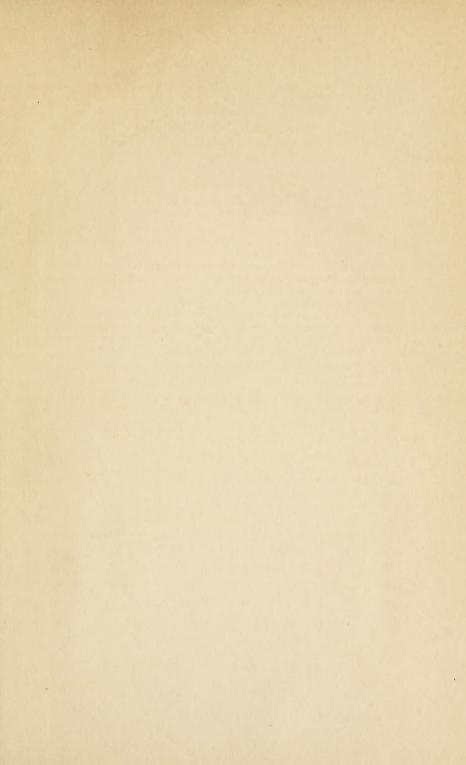
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